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الموقع التعليمي لجميع المراحل الدراسية

في المملكة العربية السعودية

COMPUTER SKILLS
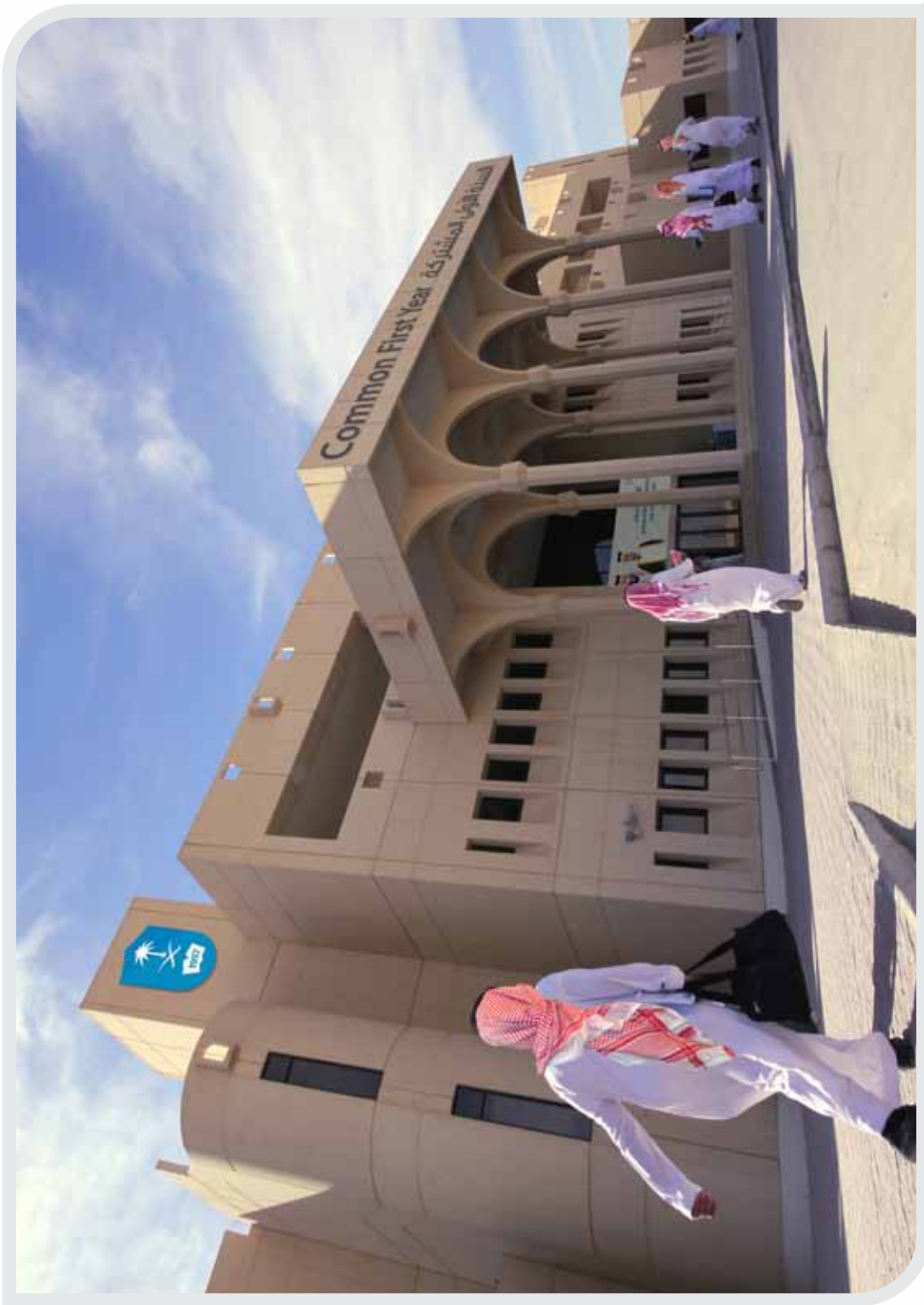
CT 101

Fifth Version
Second Edition
1440 - 2019

بسم الله الرحمن الرحيم

Welcome Message

Dear   Common First Year Students

Peace Be Upon You

We are pleased to present the revised edition of the Computer Skills CT 101 book. We have tried to implement the recent best practices in curriculum designing while developing this book, and that comes in harmony with the KSU principles to pursue development and quality continuously.

You as a Common First Year student, the main target audience of this book, are responsible for constructing your future, community and the country. This book can fulfill your requirements and exceed your expectations.

In order to gain the most of benefits of studying this course, you have to remember that your success depends on your strong will, persistence and accomplishment of all the activities of the curriculum. It also depends on your motivation through participation in your classroom, positive interaction with the Trainers, participating in individual activities and group work. Your success also depends on your punctuality and following up with all schedules and activities on the Deanship website. Thus, you are expected to actively participate in LMS and PCA classroom activities as well as completing the Self-Learning Project and other course tasks on time.

Dear Students,

While you are studying Computer Skills, please keep in mind that if you apply these skills in the appropriate way in your university studies and professional life, you will play an important role in developing your career and the nation.

Common First Year Deanship
King Saud University

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INTRODUCTION OF COMPUTER SKILLS COURSE (CT 101)

OBJECTIVES

General Objectives

In this Session you will get introduced with the **Computer Skills Course (CT 101)**.

Specific Objectives

At the end of this session, you will understand:

- **Introduction to Computer Skills Course CT 101**
  - The Course Hours of CT 101
  - Learning Resources for Computer Skills Course
  - Assessment
  - Grades
  - Course Calendar

INTRODUCTION

Self-development skills department is pleased to issue this brief to students about computer skills course (CT 101). The introduction session includes details about the course, assessment and self-learning projects. Hence it is advised that students refer to this introduction session in case they have any queries about this course.

1. The Course Hours of CT 101

The table below shows the number of study hours and credit hours of the course.

Course Name	Credit Hours	Total Classroom Hours	Total Number of Weeks	Hours/Week
CT 101	3 Hours	60 hours	15 weeks	4 Hours in 2 Sessions; 2 Hours/Session

Students' attendance is regularly conducted during the CT 101 sessions. As per the pledge signed by students in the very beginning of academic year that the attendance is mandatory for all students. Students are advised to abide this regulation and not to be late for the session and also to avoid exceeding the number of absence hours which will debar students to appear for the final examination.

2. Learning Resources for Computer Skills Course

2.1 The CT 101 Book

The primary resource is CT 101 book which covers the basic concepts and gives a very lucid and highly illustrated introduction to information technology. It also covers practical topics like Word Processing, Spreadsheets & Presentation graphics. Practical skills are demonstrated step by step in the form of pictures and screenshots with guidelines.
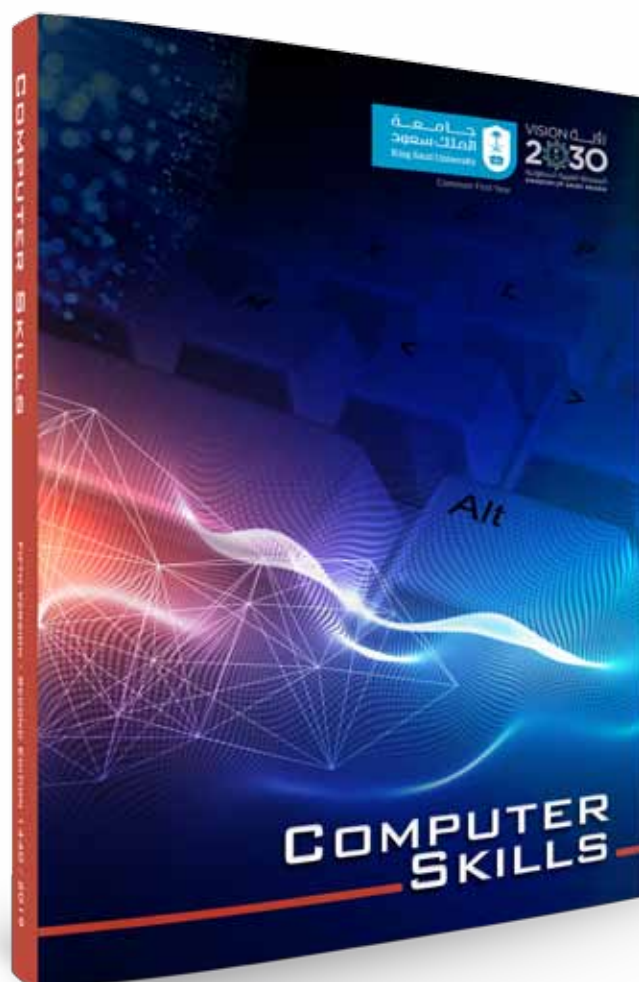
2.2 The LMS and The Interactive Learning Electronic Package

It is one of the interactive learning resources for the Computer Skills Course (CT 101) which provides computer skills learning in a fun style. It provides the theoretical content of the course organized into units. As well as it presents the practical content in the form of recorded videos to enhance the students' understanding for the required skills. It also provides questions, activities, and exercises. The student can visit the Interactive Learning Electronic Package and benefit from it at any time. It also provides discussion boards and forums in which the student can participate and ask questions or share their opinions. The Interactive Learning Electronic Package can be accessed through the following link:

http://lms.ksu.edu.sa/

or the link:

http://lms.ksu.edu.sa/webapps/login

Fig: The Homepage for the LMS

The following screenshot shows the homepage for the Interactive Learning Electronic Package displaying the courses in which the student is registered.
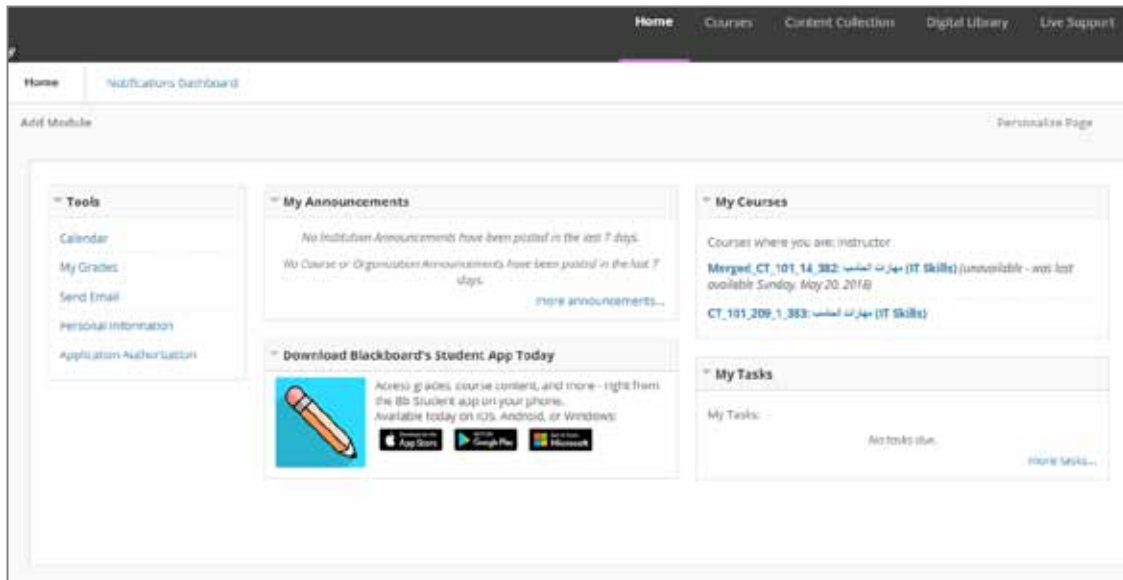
Fig: The Homepage for the LMS showing the Courses Registered

As seen on the following screenshot, the Interactive Learning Electronic Package for the Computer Skills Course (CT 101) allows the student to see basic information about the course, course description, course objectives, study plan, theoretical and practical content of the course, study sessions as well as downloading them into the student's computer. It also provides discussion boards and forums, as well as downloading/uploading assignments, solving practice exams, and checking results and grades.
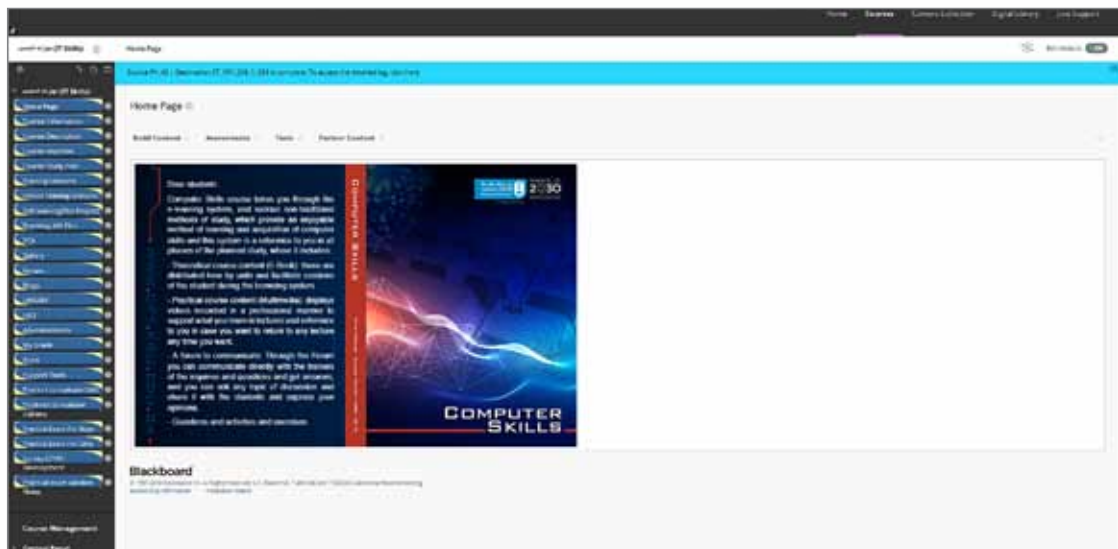
Fig: The Homepage for the Interactive Learning Electronic Package in the LMS

3. ASSESSMENT

The overall Assessment includes:

1. Two Online Exams (Mid-Term = 30 Marks and Final Term = 50 Marks)
2. Practical Continuous Assessment (PCA = 10 Marks)
3. Self Learning Project (10 Marks)

The Following table elaborates the complete Assessment parameters.

Exam Pattern	Details	Marks
Mid-Semester Exam (Online Exam)	**Module 1 – All About Computers, Internet & Microsoft Edge** **Module 2 – Operating Systems (Windows 10)**	**30**
Final Exam (Online Exam)	**Module 3 – Word Processing (Word 2016)** **Module 4 – Spreadsheets (Excel 2016)** **Module 5 – Presentation Graphics (PowerPoint 2016)**	**50**
Classroom Activity	**Practical Continuous Assessment (See section 3.2)**	**10**
Self-Learning Project	**SL Project (See section 3.3)**	**10**
Total		**100**
Pass Percentage is **60%** Overall		

3.1 Online Examinations

1. The Mid Semester Exam (30 marks) will be based on Module 1 & 2.
2. The Final Exam (50 marks) will be based on Modules 3, 4 & 5.

3.2 Practical Continuous Assessment (PCA)

These assignments are based on the content of the course and are very simple to complete.

Table below is the distribution of total number of PCA questions for each module.

Topic	No. of Questions
Module 1 - All About Computers & Internet	05
Module 2 - Windows 10	10
Module 3 - Word 2016	15
Module 4 - Excel 2016	15
Module 5 - PowerPoint 2016	10
Total	55

3.3 Self-Learning Project

Computer skills curriculum encourages students through self-learning to develop themselves and acquire additional skills. The trainer plays the role of a guide, he also urges students to search for the skill, information and teaches them basic concepts in an interesting way. At the end of this activity students have to submit a project based on the selected topic along with the project report document in MS Word format.

Students can work in group or individually based on their choice, they will be asked to select one of the following SL projects: Web Designing, Database Management System, Image Editing or another advance topic of student's choice.

The student project will be evaluated based on three parts:

- **Project's Report (03 Marks)**
- **Project's Content (03 Marks)**
- **Oral Exam (04 Marks)**

Project Report Evaluation Parameters:

The **Project Report** (Word 2016) will be evaluated on the basis of below given rubric;

Project Report – In Word	
Description	Marks
Cover Page (1 Page)	2
Auto-Table of Contents (1 Page)	2
Abstract / Introduction (1 Page)	2
Procedure and Project Description (At least 3 pages)	2
Result and References (1 Page)	2

Important Note: Total marks in the above rubric for project report is shown 10, however it will be scaled down to 3 (i.e.; 30%)

Project Content Evaluation Parameters:

The **Project Content** will be evaluated based on the rubric given below for each topic;

Topic 1: Web Designing (Using HTML or Publisher)

Website Development	
Description	Marks
Web Pages (At least 5 Pages)	2
Appropriate Website Title	1
Relevant Web Page Background (Color/Image)	1
Images (At least 3 Images)	1
Forward and Backward buttons on each page	1
Home link on each page	1
Marquee effect (At least 1)	1
Tables (At least 1 table with Appropriate content)	2

Topic 2: DBMS (Using MS Access 2016)

Database Management System	
Description	Marks
Tables (At least 1 table)	2
Use of Primary key	2
Queries (At least 1 Query)	2
Forms (At least 1 Form)	2
Report (At least 1 Report)	2

Topic 3: Image Editing

Image Editing	
Description	Marks
Submission of Raw/Base image	1
Final copy of the file xcf format	2
Use of at least one blending option	1
Pictures Layers (At least 2 layers)	1
Adding a text layer (At least 1 layer)	1
Final processed image in JPEG/PNG Format	2
Black & white conversion of output image in PNG/JPEG format	2

Other Topic of Choice

Based on the recommendation from trainer and approval from dept. the rubric for other topic of students' choice will be informed to students.

Important Note: Total marks in the above rubric for project content is shown as 10, however it will be scaled down to 3 (i.e.; 30%).

Oral Exam Evaluation Parameters:

The Oral Exam will be conducted based on the following rubric;

Oral Exam	
Description (Four questions for each student)	Marks
To explain their part in documenting the project report	1
To describe their role/part in preparing the project	1
Technical Question 1 (based on topic)	1
Technical Question 2 (based on topic)	1

Time Plan for Project Preparation Phases

Phases of Project Preparation	Week	Number of Hours
Project Introduction	Week 5	2 Hours
Project Submission	Week 12	2 Hours

Regulations for accepting late projects

Late Submission	Consequences
Submission on Week 13	Deduction of 20% of the project marks, students get graded from 80%
Submission on Week 14	Deduction of 40% of the project marks, students get graded from 60%
After Week 14	Projects will not be accepted

4. Grades

Below table shows the grade with relevance to the range of marks scored at the end of the semester.

Total Marks (Out of 100)	Equivalent Grade
95 to 100	A+
90 to 94	A
85 to 89	B+
80 to 84	B
75 to 79	C+
70 to 74	C
65 to 69	D+
60 to 64	D
Less than 60	F

5. Course Calendar

Course Calendar (Gantt chart) — Weeks 1st–15th (each week divided into sessions 1–4)

Course Sessions	Schedule
Introduction Session	Week 1
Module 1 — All About Computers, Internet & Microsoft Edge	Weeks 1–2
Module 2 — Operating Systems (Windows 10)	Weeks 3–4
ITIC Visit (Based on schedule starting from week 3)	Week 3
Module 3 — Word Processing (MS Word 2016)	Weeks 6–9
Review & Practice (Mid-Term Exam)	Week 7
Mid-Term Exam	Week 5
Self-Learning Introduction	Week 5
Module 4 — Spreadsheets (MS Excel 2016)	Weeks 10–12
Self-Learning Project Submission	Week 12
Module 5 — Presentation Graphics (MS PowerPoint 2016)	Weeks 13–14
Review & Practice (Final Exam)	Week 15
Practical Continuous Assessment (PCA)	Weeks 4–15
Final Exam	Week 15

Module One

ALL ABOUT COMPUTERS, INTERNET AND MICROSOFT EDGE

Session 1: General Concepts About Computers & Hardware

Session 2: Computer Networks, Internet & Information Security

Session 3: Microsoft Edge & Using Email

ALL ABOUT COMPUTERS, INTERNET AND MICROSOFT EDGE

Session 1

GENERAL CONCEPTS ABOUT COMPUTERS & HARDWARE

OBJECTIVES

General Objectives

In this session, you will get introduce to General Concepts about Computers and Computer Hardware.

Specific Objectives

At the end of this Session, you should be able to understand:

- **General Concepts about Computers.**
  - What is a Computer?
  - Special Features of a Computer
  - How does a computer work?
  - Types of Computers
  - Common Uses of Computers in everyday life

- **Computer Hardware.**
  - What is Computer Hardware?
  - Input/Output Devices
  - The System Unit
  - Secondary Storage Devices

LEARNING

GENERAL CONCEPTS ABOUT COMPUTERS

Today, Computers play an increasingly important role in our daily life. Computers are affecting every sphere of human activity and bringing about many changes in industry, government, education, medicine, scientific research, arts, painting and even entertainment and gaming.

Therefore, it is beneficial for every person to know about computer, its uses, benefits and how to utilize it in personal & professional life.

WHAT IS A COMPUTER ?

A Computer is an electronic device that accepts Input (data and instructions), Processes it, and produces Output as required.

Thus a computer is capable to receive user instructions, process the instructions, and provide the desired results back to the user. The diagram below depicts the operation of a computer system.

When we enter : 1 , + , and 2 as Input. The computer will process the input and display 3 as output.
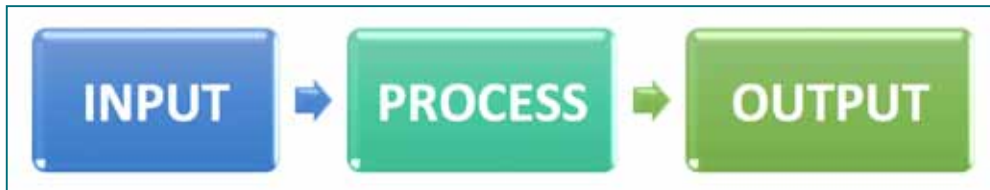
SPECIAL FEATURES OF A COMPUTER

The interesting feature of a computer is that it is **programmable**, i.e., it can be programmed and used for a variety of tasks that usually require human resource. Thus a computer can be thought of as a replacement for many of the human tasks. Further, these tasks are done with following features that make computers so special:

- **Speed** – Computers perform tasks in less than a millionth of a second.
- **Accuracy** – Computers perform tasks without any mistake.
- **Attentiveness** – Computers perform tasks and repeat them thousands of times without getting bored or tired unlike human beings.
- **Huge Storage** – Computers facilitate storing huge amount of data/ information in highly compact devices.

HOW DOES A COMPUTER WORK?

Computers are multipurpose, amazingly fast & accurate; but how do they do that? Computers are built to carry out a variety of instructions, such as Add, Subtract, Divide (that even a basic Calculator does), Read/Write a character, Compare numbers/characters, Logical operations like AND, OR, NOT, etc. Capability of performing even a 100 such instructions makes a powerful computer.

A computer system has various components that work together to accomplish a task.

It has two main components:**Hardware and Software.**

HARDWARE

Hardware consists of all the physical equipments that are tangible in a computer system.

These are the actual physical devices that perform the tasks. Hardware includes Keyboard, Mouse, Screen, Microprocessor, Memory, Hard disk, etc. Different Hardware parts will be discussed later in this session.

SOFTWARE

Computers can't do anything on their own, they need specific step-by-step instructions or directions to perform any task.

Software is a **Set of Instructions** (**Programs**) that tells the computer what to do. It directs and controls operations of the computer so that the desired task is done.

Whatever you do on a computer, a particular Software is required for that purpose.

For example, if you want to write a letter using computer, you need a Word Processing Software like **MS Word 2016**. Similarly, **Windows 10** Software is required to entirely control and manage the operations of the computer.

Unlike hardware, software is not a physical entity.
It is set of instructions processed by computer hardware.

There are two types of software: **System software** and **Application software.**

A software specially designed to Control and Manage hardware devices is called System software. In Module 2, it is discussed in detail.

Application software is a program, or group of programs, designed for end users to perform specific tasks.
In Module 3, it is discussed in detail.

TYPES OF COMPUTERS

Based on its speed and size, computer systems are usually classified into three types:

- Super Computers.
- Mainframe Computers.
- Microcomputers.

In this section, you will learn about Supercomputer and Mainframe computer, followed by Microcomputers in detail.

SUPERCOMPUTERS

A **Supercomputer** is a computer that has complex hardware configuration with high-level computational capacity. It is useful when a huge amount of data needs to be processed in a short time.

A Supercomputer is mostly used for scientific and engineering purposes, such as weather forecasting, bio-medical research and large-scale chemical analysis in laboratories, etc.

TIP

Supercomputer Shaheen-II - The Pride of Saudi Arabia

Cray XC40 Shaheen-II is the seventh fastest supercomputer in the world according to the TOP500 list in July 2015. Shaheen-II is the most powerful supercomputer in the Middle East. It's owned and operated by King Abdullah University of Science and Technology (KAUST). Built in partnership with Cray Inc.Shaheen II is intended to enable KAUST Faculty and Partners to research both large and small-scale supercomputing projects, from inception to realization.

MAINFRAME COMPUTERS

A Mainframe computer is a large central computer with more memory, storage space, and processing power, but is generally less powerful than a supercomputer.

Mainframes are used by large organizations for large-scale jobs.For example, insurance companies use mainframes to process information about millions of policyholders.

A Mainframe computer is capable of supporting hundreds, or even thousands, of users simultaneously.

MICROCOMPUTERS

The **Microcomputer** has a compact Hardware. It is small in size and the most commonly used type of computer. It is affordable and very useful for almost every business and individual for a variety of tasks.

Microcomputers are further categorized as below, based on the size of hardware:

- Desktop Computer or Personal Computer (PC).
- Laptops or Notebooks.
- Tablets and Smartphones.

TIP

In 1981, IBM came up with first personal computer known as IBM 5150.projects, from inception to realization.

Desktop Computer or Personal Computer (PC)

A Desktop Computer is designed for use by one person at a time on a desk. A typical Desktop Computer system hardware consists of a System Unit Cabinet and Input/ Output devices attached to it. It is also called as Personal Computer (PC) as it can be personalized and used according to an individual user either at home or in business. It is used for general purposes, which range from office tasks to browsing the internet and playing games.

Laptop Computer or Notebooks

A Microcomputer, small enough to be carried and used anywhere keeping on laps, is known as a Laptop. Also commonly known as Notebook, it has similar hardware components as a desktop computer, but in a compact form.

Tablets and Smartphone

Tablets are thin mobile computers in the form of a single hand-held device with a touchscreen display.

The touchscreen display uses recognition of a finger or a stylus touch (gestures) to receive user input, thus replacing the mouse and keyboard, used in desktops or laptops.

A Smartphone is similar to a tablet PC, but smaller in size and has the functions of a cellular phone as well.

It provides easy Internet browsing, personal organizer, checking emails and many useful everyday applications. Nowadays, a smartphone has many features to match the ability of a microcomputer.

Tablets are typically larger than smartphones with a screen size of 7 inches (18 cm) or larger.

COMMON USES OF COMPUTERS IN DAILY LIFE

Computers have entered into almost all areas of our life and are greatly helpful in various fields. Following examples brief how computers are changing our lives.

USE OF COMPUTERS IN EDUCATION

Computers have become essential in the field of Education; for Students, Instructors and Educational Administrators. Computer Based Training (CBT) is now very common in education. CBT is also being used in business and other organizations for various purposes, such as training employees on new products or procedures.

Following are some of the uses of computers in education:

- Teachers use computers for instructing students to achieve easy understanding of concepts, such as using PowerPoint slides.
- Use of the Learning Management System (LMS) e.g., Blackboard, for excellent management of Teaching-Learning Processes, such as:
- Planning and keeping track of learner progress.
- Collecting student's assignments.
- Enabling students to learn new skills at any time on their own pace.
- By the use of graphics, audio, video, etc., learning contents are more interesting, interactive and easy to understand.
- Computers are especially transforming the Testing & Evaluation process from traditional paper-based examinations to the advanced Online Examinations.
- E-libraries and Computer based Library Management System have changed the studies, research and teaching approach.

USE OF COMPUTERS IN GOVERNMENT SERVICES

Government offices use computers to manage different office tasks like documentation, calculation, analysis, generate reports, online communications and various government transactions. Some common examples of Government transactions using computers are:

- **Absher System** – to facilitate online Government services like Passport services, MOI Services, etc. Government Services Registration System.
- Government License Management Services.
- Electronic Payment of various government fees.
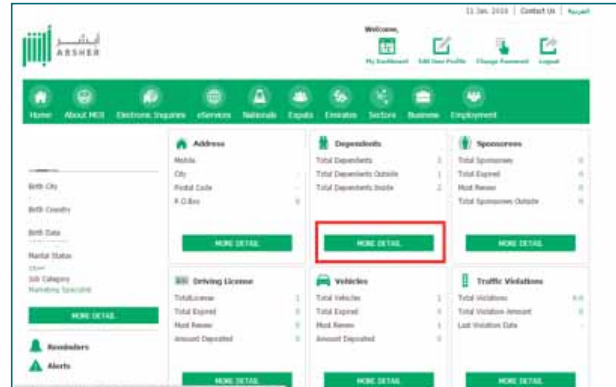
The use of computers in government services has made various transactions with government very easy and perfect.

USE OF COMPUTERS IN AIRLINE SERVICES

The use of computers in Airlines has made the travel easy, quick & economic. Many Airlines and other Web Services offer easy online Flight Search with various facilities, like:

- You can compare & choose the best suitable flight.
- Manage your reservation, e.g. seat selection or other services.
- Online Web check-in.

USE OF COMPUTERS IN BANKING SERVICES

Computers play a vital role in banks. They are reliably used by bank employees, eliminating the use of paper files. They are conveniently used by bank customers reducing the need of physically going to the bank.

Online banking has revolutionized most banking transactions with just on-screen clicks.

Following are common uses of computers in Banks:

- Banks use computers to keep track of customers and their account information.
- Computers help tellers to record all banking transactions, analyze them and prepare reports.

Session 1

USE OF COMPUTERS IN MEDICAL SERVICES

Computers are used in hospitals due to their reliability and accuracy. Several things in medical field have been simplified with the help of computers such as Open Heart Surgery.

Examples of the use of computers in medical services are:

- Diagnosis
- Prescription & Treatment
- Surgeries
- Monitoring and Analysis
- Hospital Management, Patient Records & Health status,etc.
- Billing and Financial System.

COMPUTER HARDWARE

You know that a computer system comprises of Hardware & Software. In this section, you will explore basic microcomputer hardware parts.

WHAT IS COMPUTER HARDWARE?

As discussed, the Computer Hardware is the actual physical equipment that performs dedicated tasks. It is important to know about each part of computer system, how it works and its features.

A typical computer system hardware includes:

- Input/ Output devices
- The System Unit
- Storage devices

INPUT/OUTPUT DEVICES

How do you give data to a computer? How do you get information from it? How do computers interact with people? We input text and even speech into a computer, but never think about the relationship between what we enter and what the computer processes. We understand languages that consist of letters, numbers, and punctuation marks. However, computers can understand only the Binary Machine Language consisting of only **0** and **1**.

INPUT DEVICES

Input devices translate numbers, letters, and actions that we understand into a form that computers can process.

For example, while writing a letter on a computer, you use the **Keyboard** to enter text and the **Mouse** to give commands.

While there exists a variety of input devices, the following are some of the basic and commonly used input devices.

Keyboard

A computer keyboard resembles a common **typewriter** style device. It is an input device used to enter alphabets, numbers and special characters, as well as keys for specific functions.

A keyboard is connected to a computer system using a cable or a wireless connection.

Keyboards on Notebook Computers are usually inbuilt. They are smaller in size and normally do not have a separate numeric keypad as available in the desktop keyboards.

Mouse

A Computer Mouse is a small hand-held pointing device which controls movement of a **Cursor or Pointer** on a display screen. It allows users to control and direct computers, select on-screen options, etc.

A Mouse usually has two buttons, a scroll wheel and uses laser or a ball, to control the movement of the pointer. While the mouse is usually connected to a system unit with a cable, wireless mouse have become common these days.

Scanner

Scanner is used to scan information such as photographs and documents and translate it into a digital image.

There are different types of scanners, but the flatbed scanners, as shown in the picture, are commonly used.

Microphone

A Microphone is an audio input device that converts sound signals into a form that can be processed by a computer.

A mic is commonly used with computers to record audio or communicate over the Internet.

Further, it can also be used to direct & control computers (to some extent) using a **Voice Recognition System**. It also enables us to enter text into computers by directly speaking into it, which is termed as '**Speech-to-text**.

OUTPUT DEVICES

Output devices are used by the computer system to give us the output. They receive data from a computer and produce output through monitors, speakers, printers, etc. For example, a printer produces information in the form of a hard copy printout. Another example of an output device is a computer monitor, which displays an image that is stored in a computer.

Monitors and printers are two of the most common output devices used with a computer.

Monitor

A Monitor is similar to a TV screen. It converts the information processed by the computer into visual images and displays it to the user.

The output of a Monitor is referred to as a **soft copy**.

Printer

A printer enables you to take the information processed by the computer on to paper. Printer output is called a **hard copy**.

Speakers/Headphones

Speakers or Headphones are the audio output devices, that play sound output from a computer. For example, playing an audio file, text-to-speech, system notifications, etc.

THE SYSTEM UNIT

The System Unit, also known as **System Cabinet**, is a container housing most of the electronic components that make up a computer system. It has three important components i.e., A **Motherboard, Central Processing Unit (CPU)** and **Memory.**

MOTHERBOARD

Motherboard, also known as **system board**, is the communication medium for the entire computer system. It is a flat circuit board where every hardware component, such as CPU, Memory, Hard disk, etc. are connected.

All hardware devices communicate with one another through the motherboard.
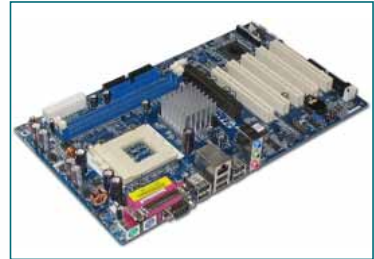
CENTRAL PROCESSING UNIT (CPU)

The Central Processing Unit (CPU), also known as **Microprocessor** of a computer, is an electronic chip that carries out the instructions of a computer program. It performs the basic arithmetical, logical, and input/output operations of a computer system. The CPU is like the **brain** of the computer.

It consists of two parts: **Control Unit (CU)** and **Arithmetic-Logic Unit (ALU)**.

Control Unit (CU)

The Control Unit controls the rest of the computer system to carry out specified instructions. It controls the movement of signals among CPU, memory, and other devices.

Arithmetic-Logic Unit (ALU)

The Arithmetic-Logic Unit performs arithmetic and logical operations. Arithmetic operations are the basic mathematical operations like **Addition, Subtraction, Multiplication,** and **Division.** Logical operations of ALU include logical comparisions such as Greater than (**>**), Less than (**<**), Equal to (=) and also True or False statements - AND, OR, NOT, etc.
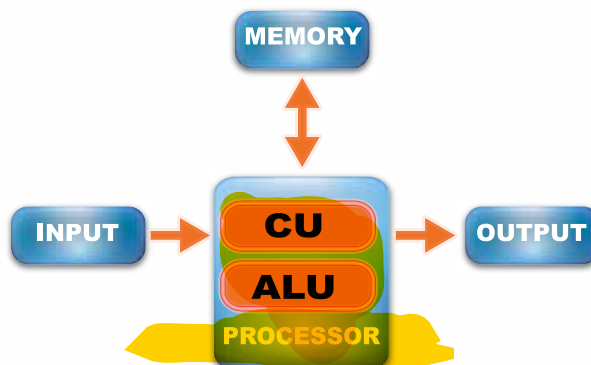
PRIMARY MEMORY

Before instructions can be processed by a CPU, they are stored along with other data in computer memory. Computer memory is the storage space in a computer where data is processed and stored. All computers have some amount of memory consisting of chips. Memory is measured in terms of *bytes.*

What are Bytes, KB, MB, GB, TB, PB?

As discussed earlier, computers understand only Machine Language or Binary Language consisting of only 0s and 1s. A '**0**' or a '**1**' is called a Binary digit or **Bit** in short. **8 Bits** make **1 Byte**: similarly 1,024 bytes make **1 KiloByte** (KB). Please refer the table below for all units of memory measurement .

Units of Memory Measurement

Unit	Description
Bit (Binary Digit)	0 or 1
Byte (B)	1 B = 8 bits
KiloByte (KB)	1 KB = 1024 B
MegaByte (MB)	1 MB = 1024 KB
GigaByte (GB)	1 GB = 1024 MB
TeraByte (TB)	1 TB = 1024 GB
PetaByte (PB)	1 PB = 1024 TB

TYPES OF PRIMARY MEMORY

There are two well-known types of memories available in computer systems: Random-Access Memory (**RAM**) and Read-Only Memory (**ROM**).

RAM

Random-Access Memory (RAM) holds programs (instructions) and data currently required by the CPU to process. RAM is called temporary or **Volatile** storage as everything in RAM is lost when the computer is switched off. When we save a file in a computer (e.g. a letter) it is copied from the RAM and stored onto a permanent storage device, like the hard disk of the computer. Thus, the RAM functions as a scratch pad memory to save the information temporarily.

Most computers today are equipped with at least 4 GB of RAM. Extra memory can be added to a computer by plugging new memory chips inside the system unit.

ROM

Read-Only Memory (ROM) is a permanent memory having built-in programs from the manufacturer. ROM chips contain instructions for booting of the computer.

Unlike RAM, ROM is **non-volatile** i.e., data in ROM is not lost when the computer is turned off. The information in ROM can't be deleted or modified.

Comparison of RAM vs ROM

RAM	ROM
Currently running programs (instructions) and data are kept in RAM by the CPU	It comes with your computer and is pre-written to hold special instructions for starting the computer.
It requires flow of electricity to retain data.	It retains data without flow of electricity.
It is a volatile memory.	It is a non- volatile memory.

SECONDARY STORAGE DEVICES

Every computer should have the ability to store information for long period of time even after the computer has been switched off. This is achieved by the Secondary Storage devices. There is a variety of such secondary storage devices, like **Hard disks, CDs**, **Flash Drives**, etc.

HARD DISK

The hard disk is the main secondary storage device in the computer system. It permanently stores software and data files. There are two types of Hard Disks:

- Internal Hard Disk (Installed within the System Unit) and
- External (Portable) Hard disk

Usually, a Hard Disk has a storage capacity of 500 GB or more.

COMPACT DISC (CD)

Compact Disc (CD) is one of the most widely used secondary storage media based on optical format. There are three basic types of CDs: **CD-R**, **CD-ROM**, **and CD-RW**.

CD-R (Compact Disc – Recordable)

These are CDs, which are recordable only once, can be read several times, but can't be erased. It is used to save data files and programs. Their storage capacity ranges between 650 MB to 700 MB.

CD-ROM (Compact Disc-Read Only Memory)

CD-ROM has the data imprinted by the manufacturer. These are used to distribute large software applications, video games, user guides, etc.

CD-RW (Compact Disc-Rewritable)

CD-RW allows erasing of previously recorded information and writing (recording) of new information on the same physical location.

DIGITAL VERSATILE DISC (DVD)

DVDs are similar to CDs, except that they have a different format with high storage capacity ranging from 4.7 GB to 17 GB. Like CDs, DVDs are also in the form of **DVD-R**, **DVD-ROM** & **DVD-RW**.

FLASH DRIVE

These are removable and rewritable storage devices, which allow you to copy, transfer and erase data several times.

Flash drives are available in different storage capacities. Generally, its storage capacity ranges from 1 GB to 2 TB.

ACTIVITIES

Activity **1**

Choose the correct option for the following statements.

1. Another name for a desktop computer is_____.

   a. Mainframe computer

   b. Tablet PC

   c. Personal computer

   d. Parallel computer

2. Which one of the following is not an input device?

   a. Scanner

   b. Mouse

   c. Keyboard

   d. Speaker

3. This part tells the rest of the computer system to carry out specified instructions.

   a. Arithmetic Logical Unit

   b. Control Unit

   c. Microphones

   d. Read Only Memory

4. RAM stands for _____.

   a. Random Active Memory

   b. Random Access Memory

   c. Read Access Memory

   d. Real Access Memory

Activity **2**

Fill in the blanks with the appropriate words provided in the box.

RAM	CPU	CD-R	CD-RW	ROM

1. _____has built-in programs from the manufacturer.

2. _____ is recorded once but can be read several times.

3. _____is often termed as the "brain" of a computer.

4. Everything in _____ is deleted when the computer is switched off.

Activity **3**

Choose TRUE or FALSE for the following statements.

1. A Microcomputer is used for large-scale chemical analysis in laboratories.

   ( ) TRUE

   ( ) FALSE

2. The next unit of data storage after the Petabyte (PB) is the Terabyte (TB).

   ( ) TRUE

   ( ) FALSE

3. RAM is called temporary (or volatile) storage because everything in RAM is lost when the computer is switched off.

   ( ) TRUE

   ( ) FALSE

4. Microcomputers are the fastest and the most powerful computers in the world.

   ( ) TRUE

   ( ) FALSE

Session 2

COMPUTER NETWORKS, INTERNET & INFORMATION SECURITY

OBJECTIVES

General Objectives

In this session, you will be introduced to Networks, the Internet and Information Security.

Specific Objectives

At the end of this session, you should be able to understand:

- **Computer Networks**
  - What is a Computer Network?
  - Benefits of Networking
  - Classification of Networks
- **Internet**
  - Overview of the Internet
  - Uses of the Internet
- **Information Security**
  - Passwords
  - Malicious Software
  - Backup
  - Copyrights

LEARNING

COMPUTER NETWORKS

In this session, you will be presented with information about computer networks, their benefits and types.

WHAT IS A COMPUTER NETWORK?

A Computer Network is a communication system that connects two or more computers so that they can exchange information and share resources. The most well-known computer network is the Internet.

BENEFITS OF NETWORKING

The two main benefits of computer networks are exchanging information and sharing of resources.

- **Exchanging Information** – This is the process of sending and receiving information in a computer network. For example, sending and receiving e-mails, business and other documents etc.
- **Sharing of Resources** – This means sharing of software resources like applications, files, data and information or sharing of hardware devices such as printers, storage devices, etc. For example, if there is a printer connected to a computer network, all the computers in the network can use the same printer.

CLASSIFICATION OF NETWORKS

Computer networks are classified into different types, based on the following:
- According to the network's Transport Media (Wired and Wireless).
- According to the network's Geographical Area (PAN, LAN, MAN and WAN).
- According to the network's Management System (Peer to Peer, Client-Server).

TYPES OF NETWORKS - ACCORDING TO TRANSPORT MEDIA

There are two types of networks based on the medium used to transport the data: Wired Networks and Wireless Networks.

Wired Networks

These computer networks are connected by wires or cables to transfer data, information and files.

For example, fiber optic cable, co-axial cable, etc.

Wireless Networks

These computer networks do not use wires or cables for connection. Instead, these networks use air as the transport medium to transfer information, data and signals. For example, Wi-Fi networks, the Cellular networks, etc.

TYPES OF NETWORKS - ACCORDING TO GEOGRAPHICAL AREA

Networks can cover anything from a handful of devices within a single room to millions of devices spread across the entire globe. Based on the geographical area a network is serving, there are four types of networks: PAN (personal area network), LAN (local area network), MAN (metropolitan area network) and WAN (wide area network).

Personal Area Network (PAN)

A personal area network (PAN) is the interconnection of devices within the environment of an individual, for example, connecting cell phones, PC's and printers through Wi-Fi, Bluetooth or infrared signals.

Local Area Network (LAN)

A local area network (LAN) is a computers network that interconnects computers within a limited area such as a residence, school, laboratory, university campus or office building. LAN can span over a limited distance up to one mile.
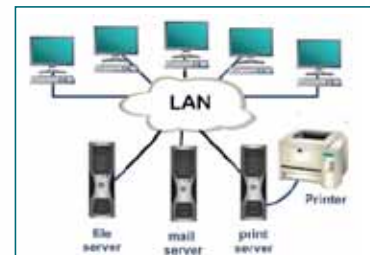
Metropolitan Area Network (MAN)

These networks are considered larger than LAN as they connect several LANs in the same city and are usually used to connect organizations, companies, banks and government agencies. MAN can span over a distance up to 100 miles.
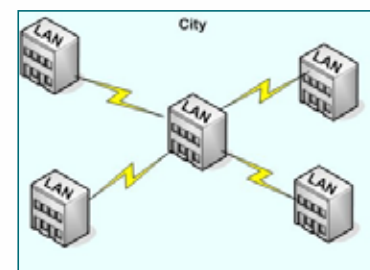
Wide Area Network (WAN)

Wide area network (WAN) is a countrywide or worldwide network, which covers distances greater than 100 miles. It uses microwave relays and satellites to reach users over long distances. The widest of all WANs is the Internet, which spans the entire globe.

Session 2

TYPES OF NETWORKS - ACCORDING TO THE NETWORK MANAGEMENT SYSTEM

Network management is the process of managing, organizing, controling and monitoring the network system. Based on network management, there are commonly two types of networks: client-server networks and peer to peer networks.

Client-Server Network

Client-server network systems use one computer (server) to coordinate and supply services to other computers (clients) in the network. The server provides access to resources such as web pages, databases, application software, and hardware.

Peer-to-Peer Network

A peer-to-peer network system doesn't have a central computer (server). All nodes have equal authority and can act both as clients and servers. For example, when a file passes through many computers on a network, these computers act as both server and client.
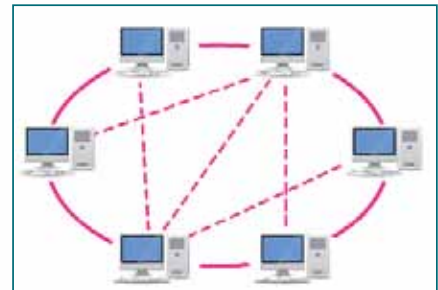
OVERVIEW OF THE INTERNET

The term "Internet" is derived from the word inter-networking, which means connecting different networks together.

WHAT IS THE INTERNET?

The Internet can be termed as a network of networks. The Internet is the global network system of private, public, academic, business and government networks.

HISTORY OF THE INTERNET

The origin of the Internet dates back to between 1960 and 1970, when the United States Department of Defense began a project on computer networks. This project was named ARPANET (Advanced Research Projects Agency Network). Gradually, after 1970, universities, government departments and research centers also began using this network.

MODERN INTERNET

By 1993, the concept of the Internet had changed completely. Instead of having a central system of limited machines, new independent centers were created in different places. This led to the birth of the modern Internet.

Session 2

USES OF THE INTERNET

There are a large number of uses of Internet for various purposes, such as e-mail (electronic mail), e-commerce and e-banking, instant messaging and many more. The following are some of the common uses of Internet.

AS A SOURCE OF INFORMATION

Today the Internet has become the main source for information in almost all areas of life. Information about everything can be accessed through the Internet. Business, education or any activity in everyday life relies on internet for information.

SHOPPING

Online shopping is one of the fastest-growing Internet applications. Using the Internet, you can purchase products and services from different websites and online stores such as Amazon, Souq, E-Bay, etc.

ENTERTAINMENT

Entertainment in different forms is available over the Internet. You can choose from a variety of entertainment options available on the Internet that suit your interests, such as playing online games, social networking, etc.

EDUCATION

E-Learning, or education with the Internet, has made it possible for everyone to learn flexibly from anywhere anytime. Online courses, virtual classrooms, online discussions and online learning management systems (LMS) are commonly-used nowadays.

COMMUNICATION

Communication is the most commonly-used application of the Internet. Electronic communication (e-communication) refers to sending and receiving information electronically through electronic devices. The information can be text messages, documents, images, audios, videos, etc.

Some examples of e-communication are e-mail, instant messaging (or chatting), social media messaging, and image sharing.

INFORMATION SECURITY

We have information stored in our computers or on the Internet, but is it safe and private? There are various information security procedures to ensure that our information is safe, protected, private, accurate and available.

The following are some of the information security procedures that we should understand and practice.

THE PASSWORD

A Password is a set of characters (letters, numbers and special characters) used to get access to a computer, web page, network resource or data.

TIPS FOR CREATING PASSWORDS

Creating a strong password is the responsibility of the owner. Below are the recommendations for creating a strong password:

- The password should be difficult to guess.
- The password should not be less than the length of 8 characters.
- The password should contain a mixture of numbers, letters and special characters (such as * , - , / , ! , @ , # , etc.).
- The password should not contain the user's name.
- The password should not contain the user's personal information, such as name, street address, phone number, date of birth etc.

TIPS FOR THE USE OF PASSWORDS

- Do not share your passwords with others.If you are provided with a new password, change it immediately after you use it for the first time.
- Change your passwords periodically.
- Do not use the same password everywhere such as e-mail, bank account, etc.
- Do not keep a written record of passwords on a paper or in an e-mail message.
- Avoid using the "Remember Password" option everywhere.

MALICIOUS SOFTWARE

Malicious software, also known as **Malware**, is any program or file that is harmful to a computer or the privacy of users. The harm done by malware can vary from something slight as changing the author's name on a document to full access of your machine without being traced.

TYPES OF MALICIOUS PROGRAMS

Malware types can be categorized as follows:

- Viruses
- Worms
- Spywares
- Trojan Horse

Viruses

A computer virus is a malicious program that attaches itself to a file or a program, enabling it to spread and infect different files. Viruses can be transmitted as attachments to an e-mail or in a downloaded file. Viruses are attached to an executable file, which means the virus may exist on a system but will not be active or able to spread until a user runs or opens the malicious host file or program.

Worms

Worms are standalone malicious software and do not require a host program or human help to spread. It replicates its functional copies and can consume system memory and network bandwidth, which in turn slows down or causes failure of the computer/network system.

Spywares

Spyware is classified as privacy-invasive software. The most common spyware function is to steal personal information and address book (identity theft and keystroke-logging). It hijacks the browser and redirects it to advertising web pages.

Trojan Horse

A Trojan is another type of malware. It is a harmful piece of software that looks genuine. Users are typically tricked into loading and executing it on their systems. After it is activated, it can achieve any number of attacks on the host, from irritating the user (popping up windows or changing desktops) to damaging the host (deleting files or activating and spreading other malware). Trojans are also known to create back doors to give malicious user access to the system.

Session 2

HOW MALICIOUS SOFTWARE ENTERS YOUR COMPUTERS

Malicious software usually enters our computers through the following ways:

- Removable storage devices.
- Email attachments.
- Internet downloads.

Other Malicious Activities

Hoaxes

A hoax is a false warning about a computer virus. Typically, the warning arrives in an e-mail note. These kinds of email notes pretend that they are from IBM, Microsoft or other genuine companies. A number of hoaxes have warned users that vital system files are viruses and encourage them to delete those files, possibly damaging the system.

Phishing

Phishing is an un-authorized attempt to obtain vital information such as usernames, passwords, and credit card details by hackers masked as trustworthy entities in an electronic communication. Often the attackers use fake e-mails or websites in an attempt to scam the user into surrendering private information.

HOW TO PROTECT YOUR COMPUTERS FROM MALICIOUS SOFTWARE

To stay protected from malicious software:

- Be aware of common virus symptoms and the ways they attack.
- Be aware of suspicious, new process names in the list of running processes.
- Avoid using the "auto-run" option in Windows OS for portable drives.
- Use anti-spyware software, anti-virus software and scan and update regularly.
- Always be wary of strange e-mails, especially ones with attachments.
- While browsing the internet, always confirm what you click, download and install.

THE BACKUP

Backup is the activity of storing multiple copies of important files, databases or software so that the information is preserved in case of computer failure, hard disk crash or other disasters.
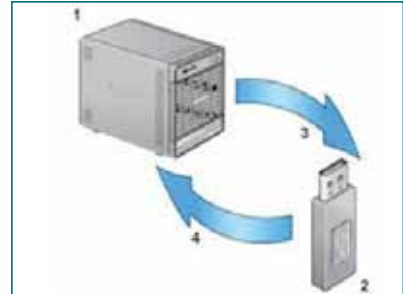
WHERE CAN I BACKUP MY FILES

Personal computer users can back up important data in two ways: Local Backup & Internet Backup (cloud storage).

Local Backup

This is backing up data on an external hard disk, CD, flash drives, etc.

Internet Backup (Cloud Storage)

This is backing up of data onto several servers on the internet.
Many cloud storage services offer a free limited storage space, which is commonly enough for most users.

The following are the benefits of backing up data on a cloud storage:

- The ease of sharing files.
- The ease of managing files & data through hand-held mobile applications.
- Reducing the costs of backups and data maintenance.
- Examples of cloud storage service providers:
- **Drop Box** – offers up to 2 GB free space from DropBox
- **Google Drive-** offers up to 15 GB free space from Google
- **OneDrive**- offers up to 15 GB free space from Microsoft

Session 2

COPYRIGHT

Copyright is the ownership of an intellectual property within the limits prescribed by a national or international law. This ownership protection is available for both published and unpublished works.A copyright law grants ownership rights to the owner exclusively. These rights include:

- To reproduce the work.
- To prepare derivative works.
- To distribute copies.
- To perform the work.
- To display the work publicly.

A copyright notice should contain the following three elements:

- The symbol © (the letter C in a circle), the word "Copyright" or the abbreviation "Copr."
- The year of the copyright.
- The name of the owner of the copyright.

  Example: © 2018 King Saud University

ACTIVITIES

Activity 1

Choose the correct option for the following statements.

1. A _____ is the interconnection of devices within the environment of an individual through Wi-Fi, Bluetooth or infrared signals.
   a. Personal Area Network (PAN)
   b. Local Area Network (LAN)
   c. Metropolitan Area Network (MAN)
   d. Wide Area Network (WAN)

2. A _____ connects within a limited area such as a residence, school or office building.
   a. Personal Area Network (PAN)
   b. Local Area Network (LAN)
   c. Metropolitan Area Network (MAN)
   d. Wide Area Network (WAN)

3. _____ is classified as privacy-invasive software.
   a. A Virus
   b. A Worm
   c. A Trojan Horse
   d. Spyware

4. _____ is a harmful piece of software that looks genuine.
   a. Trojan Horse
   b. Spyware
   c. Phishing Scam
   d. Hoax

Activity **2**

Fill in the blanks with the appropriate words provided in the box.

Worms	Trojans	Peer-to-Peer	Spyware	Password

1. A _____ is a set of characters used to get access to a computer, web page or network resource.

2. _____ are known to create back-doors to give malicious users access to the system.

3. _____ are standalone malicious software and do not require a host program to spread.

4. A _____ system doesn't have a central computer.

Activity **3**

Choose TRUE or FALSE for the following statements.

1. Wireless Networks do not use wires for connection.

   ( ) TRUE

   ( ) FALSE

2. Malicious software is any program or file that is not harmful to your computer.

   ( ) TRUE

   ( ) FALSE

3. A peer-to-peer network system has a central computer to coordinate and supply services to other computers in the network.

   ( ) TRUE

   ( ) FALSE

4. Internet Backup involves backing up of data onto several servers on the internet.

   ( ) TRUE

   ( ) FALSE

Session 3

MICROSOFT EDGE AND USING EMAIL

OBJECTIVES

General Objectives

In this session, you will learn about Microsoft Edge and Using Email.

Specific Objectives

At the end of this Session, you should be able to understand:

- **Microsoft Edge**
  - What is WWW?
  - What is a Browser?
  - Introduction to Microsoft Edge
  - Navigating the web using Edge
  - Features of Microsoft Edge
  - Finding Information on the Web

- **Using Email**
  - What is an E-mail?
  - Spam

LEARNING

MICROSOFT EDGE

Before you start working with Microsoft Edge, you should understand some basic concepts about WWW, URL, browsers, etc.

WHAT IS WWW?

The **World Wide Web (WWW)** is a network of interlinked pages of information, spread all over the world and accessible through the Internet.
Information on the Internet is presented as webpages.

A **Webpage** consists of text, graphics, audio, video, etc.

A **Website** is a group of webpages related to a subject and resides full time on the Internet.

A web page has links or **hyperlinks** to other web pages of the same or different websites.

A **home page** is the main page or the opening screen of a website and provides brief overview of its contents.

UNIFORM RESOURCE LOCATOR (URL)

Each website or a webpage has a distinct and unique address on the internet. This address or name of the website is known as the **Uniform Resource Locator** or **URL** in short. An example of a URL is

http://www.google.com

Parts of a URL
A URL starts with the name of communication **Protocol** (http://) followed by the **Sub-domain** (www.), then the **Domain name** (google) and ends with the **Domain code** (.com).

Common Domain Codes:

.com	:	Commercial website
.org	:	Organization website
.edu	:	Education website
.gov	:	Government website
.sa	:	Saudi Arabia (country)
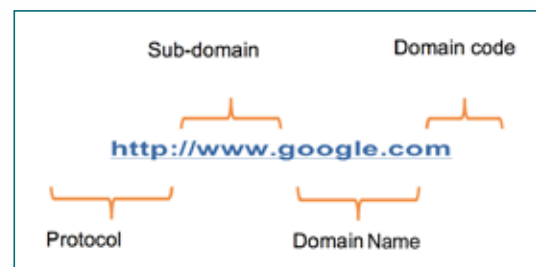
WHAT IS A BROWSER?

Generally, users access the Internet and browse through World Wide Web (WWW) with a **Web Browser**. A Browser is a Software that connects to the Internet and brings information from several parts of the world to your computer screen.

Commonly used browsers include **Microsoft Edge, Google Chrome, Safari, Mozilla Firefox,** etc.

Thus, to open a website on your computer, you have to provide its name or URL to the Browser. The Browser takes this URL from its address bar, locates the website on the Internet and displays the home page onto your screen.

INTRODUCTION TO MICROSOFT EDGE

Microsoft Edge is the latest web browser released with Windows 10 by Microsoft. Speed, Security, and Simplicity are the main features of Microsoft Edge.

Edge is in fact a **Universal Application,** which means you can use it on any Windows device; your PC, tablet or on your smartphone.

It has many interesting and useful features that give you an enjoyable browsing experience.

Starting Edge

To Start Edge,

1 Simply Click on the Edge tile from the Start Menu, Or

2 Click on Microsoft Edge from the all programs list in the Start Menu.

A The Edge Start window comes up on your screen.
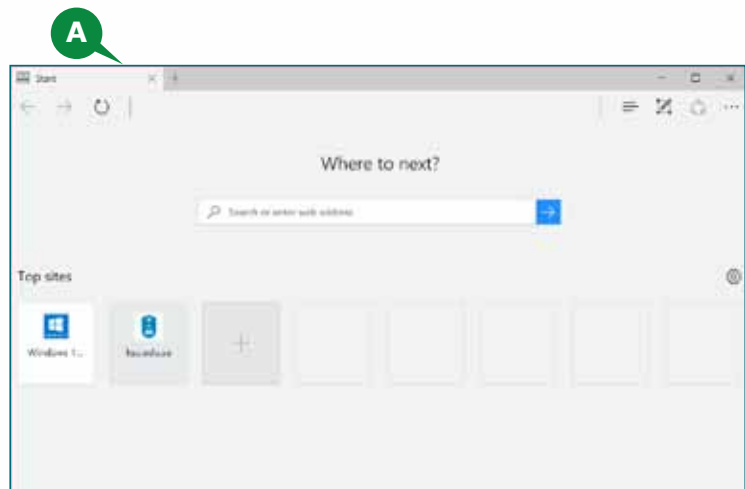
EDGE USER INTERFACE

Edge is designed to provide a simple and clean user interface with minimal distractions. The picture shows the sleek user Interface of Edge. It mainly has:

A A Search or Address box in the middle,

B Edge Controls Toolbar at the top, and

C Top site tiles for handy access to the widely used websites.
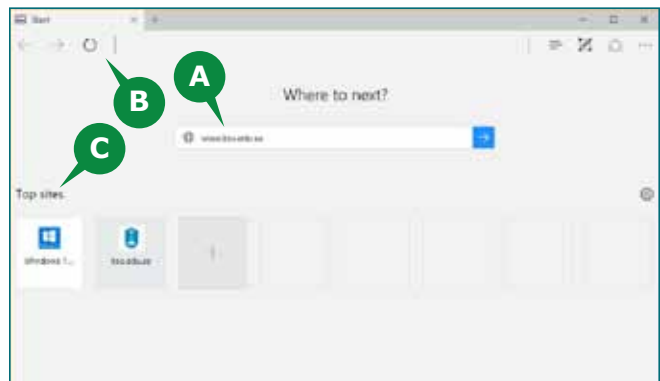
NAVIGATE THE WEB USING EDGE

This section will guide you to browse and navigate the web pages using Microsoft Edge.

OPENING A WEBSITE IN EDGE

To open a website, follow the steps given below:

1 Enter URL of the website into the Address box, and

2 Hit the Enter Key or Click on the Go button (→) at the right end of the box.
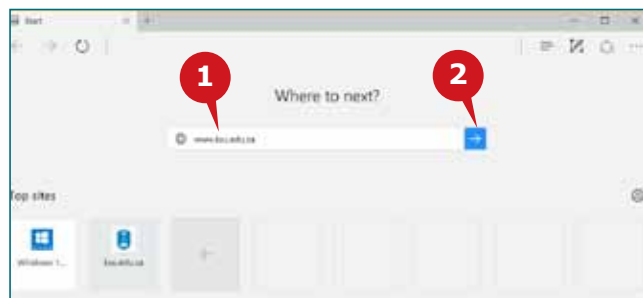
For example, open the King Saud University website by entering the URL

→ **www.ksu.edu.sa**

EDGE CONTROLS TOOLBAR

Once a webpage is displayed, the Edge Controls Toolbar becomes Active on the top. It helps you to navigate through webpages easily.
Edge Controls Toolbar has the following:

A Back, Forward Buttons   Allows you to navigate back and forth through the visited pages.

B Refresh Button   Allows you to update and display the latest contents of the webpage.

C Address Box   Displays the URL of the current webpage. You can also click and type to open another URL from here.

D Reading View   Opens the current webpage in Reading view, if it supports.

E Add to Favorites   Add to favorite icon.

F Favorites Hub   Opens the Favorites Hub pane.

G Web Note   Allows you to annotate (write notes) on the current webpage.

H Share   Allows you to share the webpage with others.

I More Actions   Opens the More Actions pane.
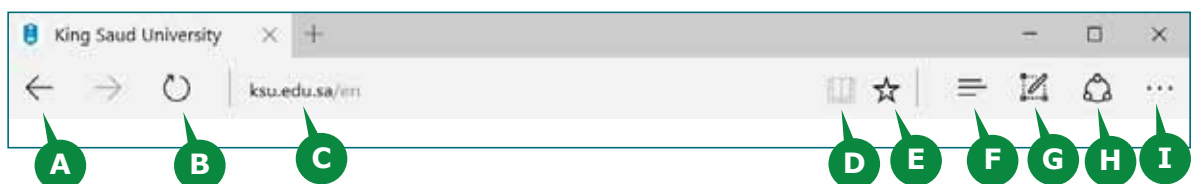
FAVORITES HUB

If you often visit a web page, you can add it to your Edge Favorites for easier and quicker access.

Adding a webpage to Edge Favorites

To add a webpage to Edge Favorites, follow the steps given below:

1. Open the webpage, Click the Add to Favorite icon (☆) on the Edge toolbar.
2. Choose a Name.
3. Choose Save In – Favorites or Favorites Bar.
4. Click the Add button.

Opening the Edge Favorites List

To open Edge Favorites List, follow the steps given below:

1. Click the Hub icon (≡) on the Edge toolbar.
A. The Favorites Pane appears on the right side, which contains all your favorite webpages.

Delete or Rename an item from the Edge Favorites List

To Delete (or Rename) an item from the Edge Favorites list, follow the steps given below:

1. Just Right Click on the item,
2. Choose Delete (or Rename.)
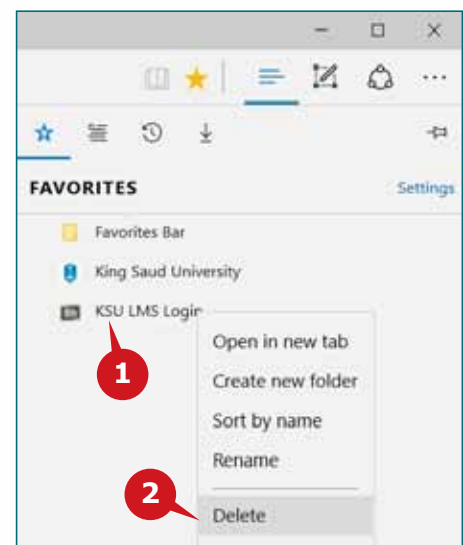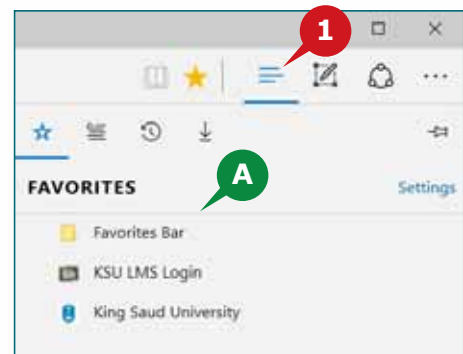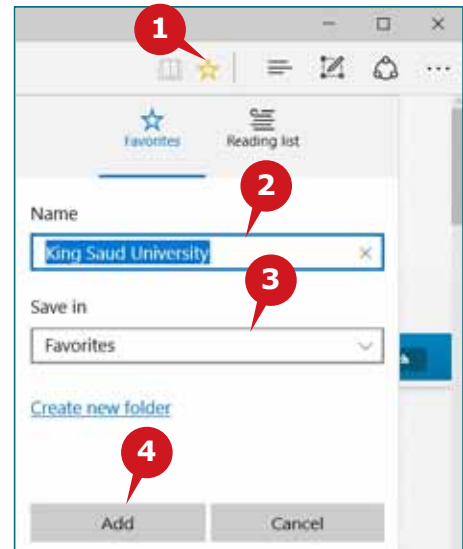
Pinning a webpage as tile in Start Menu

To Pin a web page as tile in the Start Menu, follow the steps given below:

1 Click on the More Actions Icon (⋯) on the right end of the Edge toolbar

2 Choose the Pin this page to start.

New window

New InPrivate window

Zoom   — 100% +

Cast media to device

Find on page

Print

Pin this page to Start

F12 Developer Tools

Open with Internet Explorer

Send feedback

Extensions

What's new and tips

Settings

SETTING A HOME PAGE IN EDGE

By default, Edge starts with its Start Screen. You can change Edge to open with Previous Pages or a specified page or pages.

To change the homepage in Edge, follow the steps given below:

1 Click on More Actions icon.

2 Choose Settings.

3 In the Open Microsoft Edge with box, choose one of the following:

   Start page

   New tab page

   Previous pages

   A Specific page or page

4 If you choose A Specific page or pages, Enter a URL in the a text box that appears and Click on the Save icon (🖫) next to it.

New window

New InPrivate window

Zoom   — 100% +

Cast media to device

Find on page

Print

Pin this page to Start

F12 Developer Tools

Open with Internet Explorer

Send feedback

Extensions

What's new and tips

Settings

TIP

To open multiple webpages in different tabs, at the startup (Home page), you can click on " + Add new page" button, which appears after adding a specific webpage as Homepage.
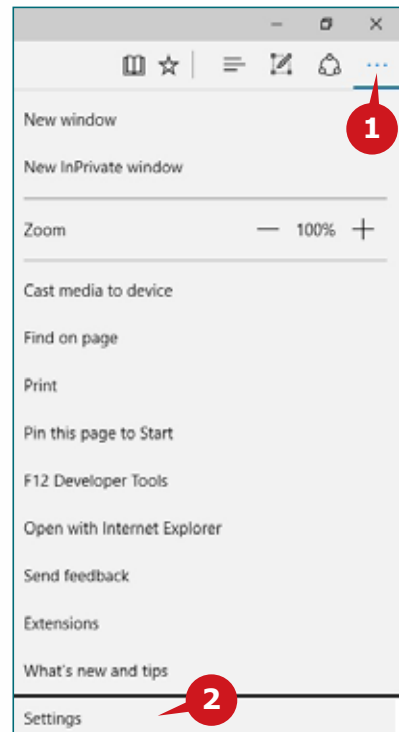
A Similarly, you can decide whether to "Open new tabs with" either Topsites, Suggested contents, or simply A blank page.
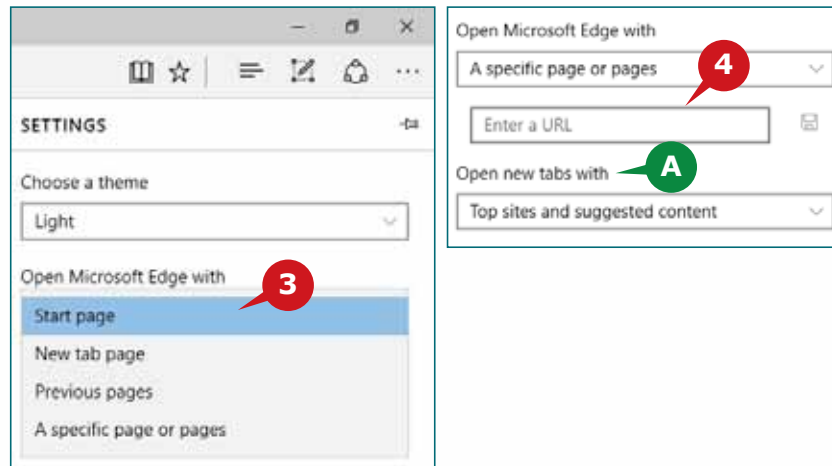
FEATURES OF MICROSOFT EDGE

This section will guide you through some of the new and useful features of Microsoft Edge.

TABBED BROWSING

Edge provides the Tabbed browsing interface, which is now a common feature in most of the web browsers. This allows you to open multiple websites in the same Microsoft Edge window. So you open each website in a tab and can quickly switch between open websites by simply clicking on the tabs at the top.

Creating a New tab

To create a new tab, follow the step given below:

1 Click the New tab plus sign "+" in the tabs bar at the top of the Edge window.

A The new tab appears with the default contents.

You can enter the URL to open the website.

TIP
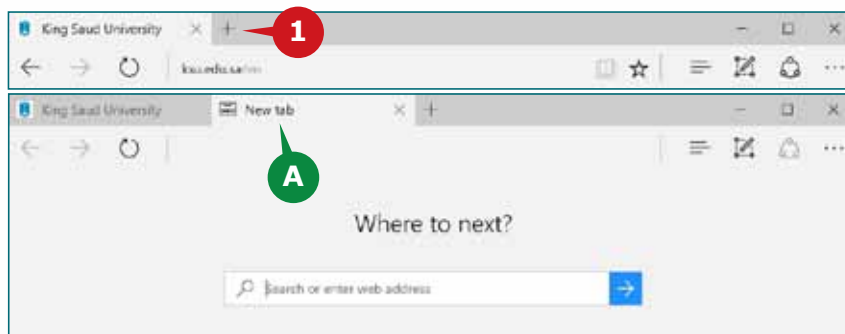
Keyboard Shortcut

To create a new tab, Hit → Ctrl + T

Opening a Link in a New Tab

To open a link in a new tab, from within an open webpage tab, follow the step given below:

1 Right-Click on the link, and choose Open in new tab.

A new tab will be added in the tabs bar and the link will be opened in it, while you continue surfing on the same webpage tab.

You can click on the newly created tab to view its contents.

Opening a link in a new Edge Window

To open a link in a new Edge Window, from within an open webpage tab, follow the step given below:

2 Right-Click on the link, and choose Open in new window.

The link will be opened on a new Edge window and it becomes your active Edge window.
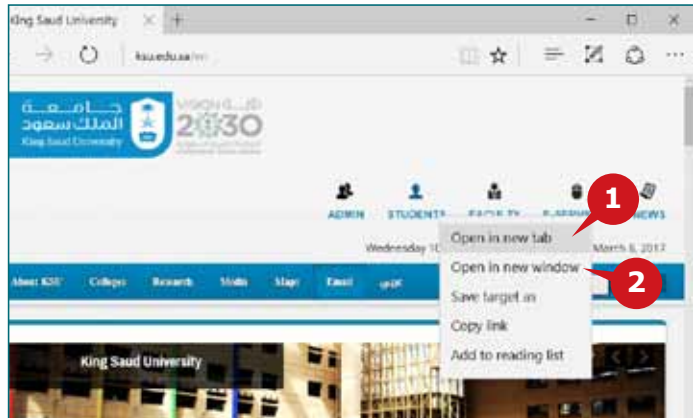
Closing a tab

To close a tab, follow the step given below:

1 Click the Cross sign " X " to the right side of the tab.

The tab will be disappear and you go to the previous tab.
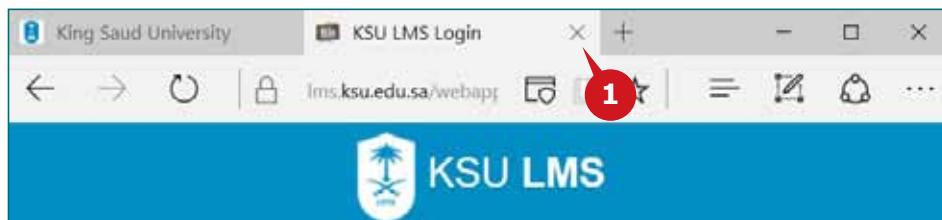
If you have multiple open tabs and you are closing the Edge window, it will ask you for confirmation

"Do you want to close all tabs?".

You can disable it by choosing Always close all tabs.
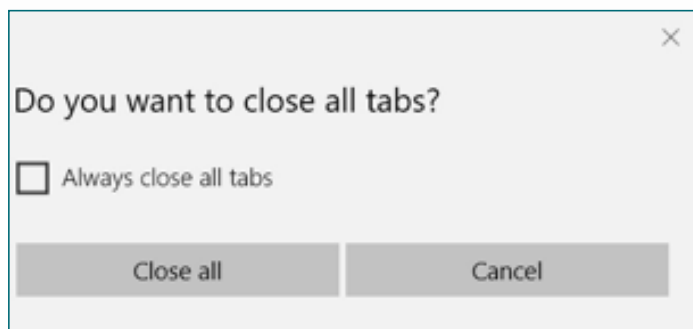
IN-PRIVATE BROWSING

Web browsers keep track of the websites you visit, information you enter and even your credentials, in order to provide a faster browsing experience. To ensure your information and credentials aren't available to other people who use the same computer, Edge provides the InPrivate browsing session. In other words, you can restrict Edge from tracking your browsing and credentials information by using an InPrivate browsing session. When using InPrivate browsing, Edge opens a separate window, which doesn't track your browsing info or credentials. Even the sites you visit do not appear in the history list.

To start an InPrivate browsing session, follow the steps given below:

1 In the Edge window, click the More actions icon to open the More actions menu.

2 Click the New InPrivate window.

A new InPrivate Browsing window appears.

TIP
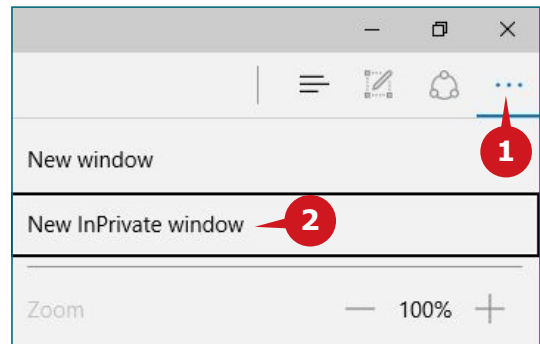
Keyboard Shortcut *: To open a new InPrivate Browsing window, Hit* → Ctrl + Shift + P

WEB NOTE

An exciting feature of Edge is the Web Note. It allows you to annotate (draw and write on) a snapshot of the webpage by using the annotate tool. You can then save or share the annotated webpages.

To create a Web Note, follow the step given below:

1 On the Edge toolbar, click the Make a Web Note button.
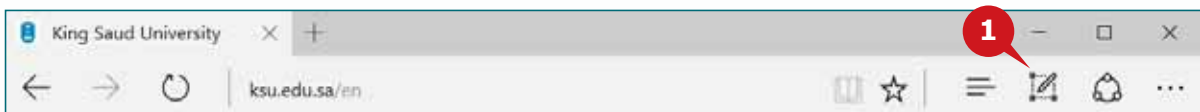
Edge converts the webpage to a screenshot and displays an annotation toolbar at the top of the page.

Although the buttons on the Annotation toolbar are self-explanatory, the following is a short summary of the functions of each button.

A Pen   Allows you to draw on the webpage with desired ink color and point size.

B Highlighter Allows you to highlight with desired ink color and size.

C Eraser   Allows you to erase any ink you have drawn or "Clear all ink"

D Add a note Allows you to add a typed note on any area in the webpage

E Clip   Allows you to take a screen clipping of an area of the webpage.

F Save   Allows you to save your web note in your Edge favorites hub or any Notes application.

G Share   Allows you to share your web note

H Exit   Allows you to end your annotation on the page and continue browsing.

READING VIEW

Edge has a Reading view that hides the detracting elements and displays the current webpage as it might appear in an e-book reader so that you can focus on the contents.

Reading view becomes available only after Edge loads all the webpage content, including advertisements. Reading view is available only for some webpages. It isn't usually available for website homepages, online commerce sites, or webpages that don't contain much text.

The reading view icon on the Edge toolbar becomes activated or deactivated based on whether the reading view is supported for the current webpage.
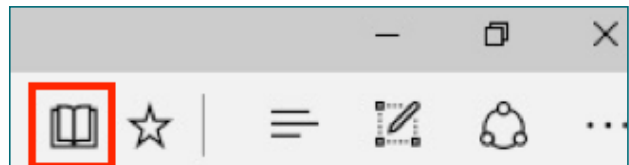
You can also change the Reading view style or Reading view font size from the Edge Settings pan.

FINDING INFORMATION ON THE WEB

As you know, there is a vast ocean of information available on the World Wide Web. Searching for a specific information is often a challenge. Search Services such as Google or Bing search, help you to quickly locate what you are looking for on the web.

SEARCH SERVICES

A web search can be done either by providing a keyword (or a phrase) to a Search Service or by browsing through a directory of topics it provides. However, the keyword search is the most common, easiest and quickest.

In a keyword Search, you enter a keyword or a phrase that describes what you are looking for on the web, to a Search Service.

The Search Service has a special program, called Search Engines, which accesses the databases of World Wide Web around the world.
It then matches the websites that has the information related to the keyword you have provided and gives you a list of such websites.
You can then identify the most suitable website from the list.

Google Keyword Search provides an option of Advanced Search, which allows you to be more specific in search and get only the appropriate results. In advanced search, you can provide the Search Engine with different values in addition to a keyword, such as region or country, language, file type, etc.
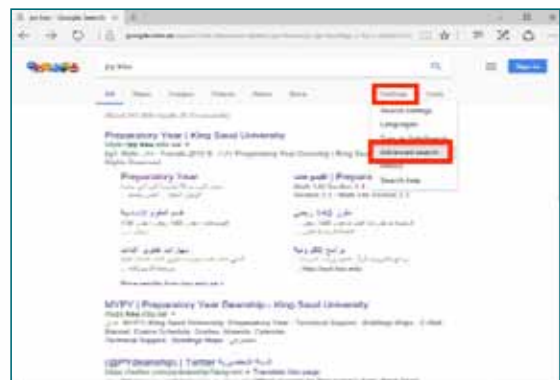
USING THE SEARCH BOX OF EDGE

The Address bar of Edge serves as a "Search Box" as well i.e., you can perform a web search right from the Edge address bar. This eliminates the need to open a Search Engine specifically for that and enter the keyword.

When you enter a URL in Edge address bar, Edge opens the website. If you enter a search keyword (or an incorrect URL) in the address bar, Edge initiates an online web search by using its default Search Engine and displays the result of the web search.
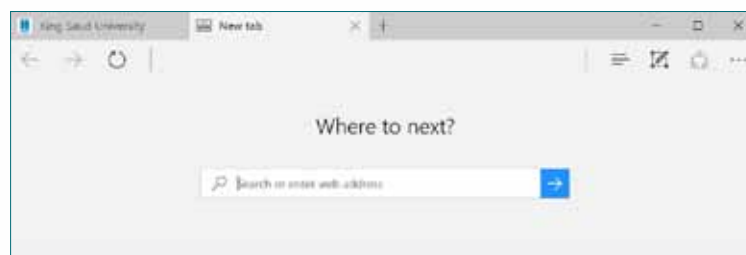
Setting the default Search Engine in Edge

You can change the default search engine of Edge to any Search Service that uses the OpenSearch technology.

In Microsoft Edge, open the website of the Search Engine you want and follow the steps given below:

1 Click on the More actions icon.

2 Choose Settings. The Settings pane appears.

3 Scroll down and Click on View advanced settings button.

4 Scroll down and Click on the Change search engine to display the list of search engines.

5 Select your search engine from the list and Click on Set as default button.

If the list doesn't include your Search Engine, make sure that you have opened the Search engine site in Edge and that it uses OpenSearch technology.
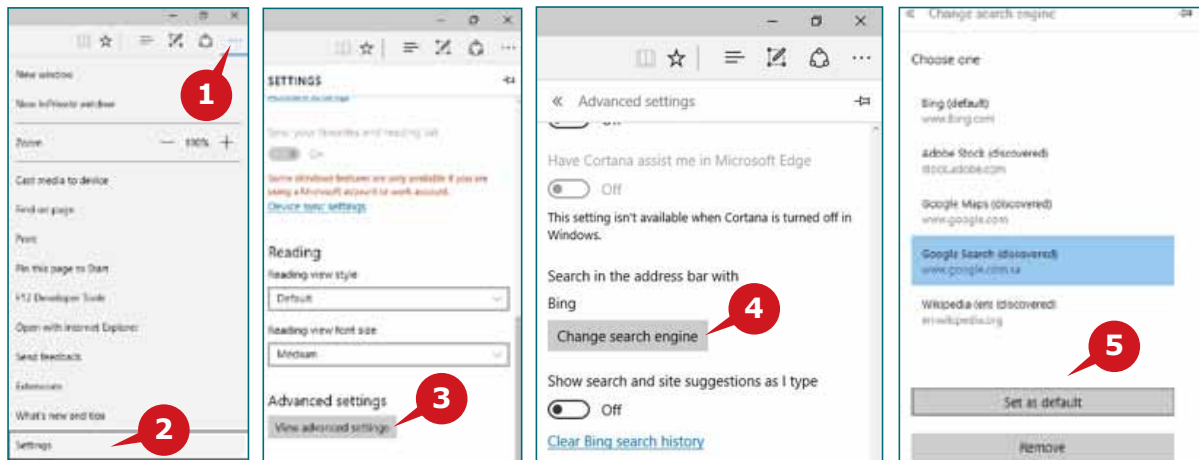
USING EMAIL

You know that the Internet is widely used for communication. Although there are different forms of communications possible over the internet, e-mail (Electronic Mail) is, by far, the most reliable method.

It provides a fast and efficient alternative to the traditional mail.

WHAT IS E-MAIL?

E-Mail, short for Electronic Mail, is an electronic form of sending and receiving letters across the Internet. It is a modern way to communicate with friends, family, and colleagues.

An email message is like a regular letter, but it's composed electronically and delivered almost immediately via the Internet.

BENEFITS OF EMAIL

The following are some of the various benefits of using email for communication.

- **Accessible Anywhere at Any Time,** You can access it from any computer or mobile device that has an Internet connection.

- **Privacy** Your email is delivered to your own personal and private account (mailbox) and a password is required to access and view emails.

- **Easy Mail Management** Email service providers have tools that allow you to file, label, prioritize, find, group, and filter your emails for easy management. You can even easily control spam, or junk email.

- **Communication** with Multiple People You can send an email to multiple people at once, which gives you the option to include as many people as you want in an e-mail conversation.

- **Productivity** Tools Email is usually packaged with a calendar, address book, instant messaging, and more offer convenience and productivity.

- **Access to Web Services** If you want to sign up for an account like Facebook or order products from services like Amazon, you will need an email address so you can be safely identified and contacted.

ACCESSING AND MANAGING E-MAIL

A variety of email service providers are available over the internet. Most of them provide access to email through Web Mail Service or by Email Client Application.

Web Mail Service

The most popular is the **Web Mail Service,** which offers to manage all your emails online through web based access. The basic email management is free by almost all email service providers whereas you need to pay for some advanced email management features. Some of the examples of web mail services are Gmail, Hotmail, Yahoo Mail, AOL mail, etc.

To use the web e-mail service, you need to **register** with the email provider. This is commonly referred to as the **Sign Up** process, which involves choosing a username & password for your email account, entering your general information to the email provider, and accepting the Service Agreement with the email provider.

Email Client Application

Another way to access your emails is by downloading all your emails to your computer by using a special email software which provides a variety of email management features as well. The email software uses the Post Office Protocol (POP3) Service provided by the email provider to access and manage emails.

Mail

The email software allows you to work offline on your emails and can connect to the Internet only to Send and Receive emails.

Examples of such email software are MS Outlook 2016 and Windows Mail which offer to configure and manage your multiple email accounts at one place.

E-MAIL ADDRESS

To receive emails, you need an **email account** and an **email address.** Also, if you want to send emails to other people, you will need to obtain their email addresses.

An email address has a standard format which everyone has to follow. The format of the Email addresses includes a Username, the @ symbol, and the Domain name.

The Username is a unique name that you choose to identify yourself with the email provider.

The Domain name is the website name of the email provider that hosts your email account.

For example, if gmail is your email provider and your user name is ksu1957, your email address will be:

ksu1957@gmail.com

User Name   Domain Name
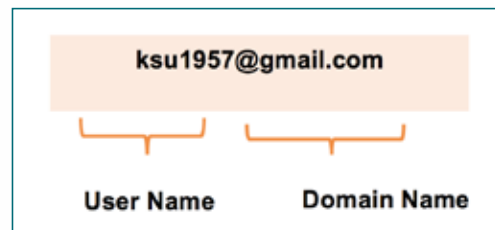
BASIC ELEMENTS OF AN E-MAIL MESSAGE

A typical e-mail message has three basic elements: Header, Message and Signature.

Header

The header of an email message consists of the following elements:

- **Address**
  This section includes the email addresses of the Sender and the Receivers. It usually has "To" box where we enter the primary receiver's email address. You can enter multiple email addresses if you have to send an email to multiple recipients.

- **Subject**
  This is a one-line description used to present the topic of the message.

- **Attachment**
  You can attach files such as documents and pictures to a mail message.

Message body

This is the actual message for the recipient.

Signature

The signature line at the bottom of the message identifies the sender.

You can set a signature that is automatically inserted at the bottom of every message you send.

Typically, in official emails, Signature includes the sender's name, designation and contact information.

SPAM

Email spam, also known as junk email or unsolicited bulk email (UBE), refers to the use of electronic messaging systems to send out unrequested or unwanted messages in bulk. It may be advertising goods or services, or even warning of a new supposed "virus". Spam email may also include malware as scripts or other executable file attachments.

SPAM BLOCKER

Spam Blocker is computer software that is designed to identify and eliminate spam or junk mail and prevent those messages from getting to a user's inbox. The Mozilla Thunderbird e-mail program which is available for free download at "www.mozilla.com" comes with built-in spam blocking software. Spam blocker is also known as spam filter.

CAN-SPAM ACT

In the United States of America, the CAN-SPAM Act has been enacted which requires that every marketing-related e-mail provides an opt-out option. When the option is selected, the recipient's address is to be removed from future mailing lists.

ACTIVITIES

Activity 1

Choose the correct option for the following statements.

1. WWW stands for _____.
   a. Wide World Web
   b. World Wide Web
   c. Web Wide World
   d. World Wide Website

2. URL stands for_____.
   a. Uniform Resource Locator
   b. Universal Resource Locator
   c. Universal Receive Location
   d. Uniform Rescue Locator

3. Which one of the following is not a web browser?
   a. Microsoft Edge
   b. Mozilla Firefox
   c. Microsoft Word
   d. Safari

4. Which of the following is the keyboard shortcut for creating a new tab?
   a. Ctrl + T
   b. Ctrl + Shift + T
   c. Ctrl + Shift + P
   d. Ctrl + N

Activity 2

Fill in the blanks with the appropriate words provided in the box.

Web Note	Microsoft Edge	Reading View	Edge Toolbar	Home Page

1. A _____ is the main page or the opening screen of a website.

2. _____ is the latest web browser released with windows 10 by Microsoft.

3. _____ feature of Edge lets you annotate a snapshot of the webpage.

4. The _____ feature of Edge displays the current webpage as it might appear in an e-book reader.

Activity 3

Choose TRUE or FALSE for the following statements.

1. You cannot Delete or Rename items from the Edge Favorites list.

    ( ) TRUE
    ( ) FALSE

2. While using InPrivate browsing, Edge opens a separate window that doesn't track your browsing info or credentials.

    ( ) TRUE
    ( ) FALSE

3. Post Office Protocol (POP3) email service can download mails onto your computer.

    ( ) TRUE
    ( ) FALSE

4. Spam Blocker is designed to identify and eliminate spam or junk mail.

    ( ) TRUE
    ( ) FALSE

Module Two

Operating Systems (Windows 10)

Session 4: Overview of Operating System, Getting Started with Windows 10 & Exploring Windows 10

Session 5: Personalizing Windows 10, Managing Content & App Windows

Session 6: Managing Folders, Files, and Computer Settings
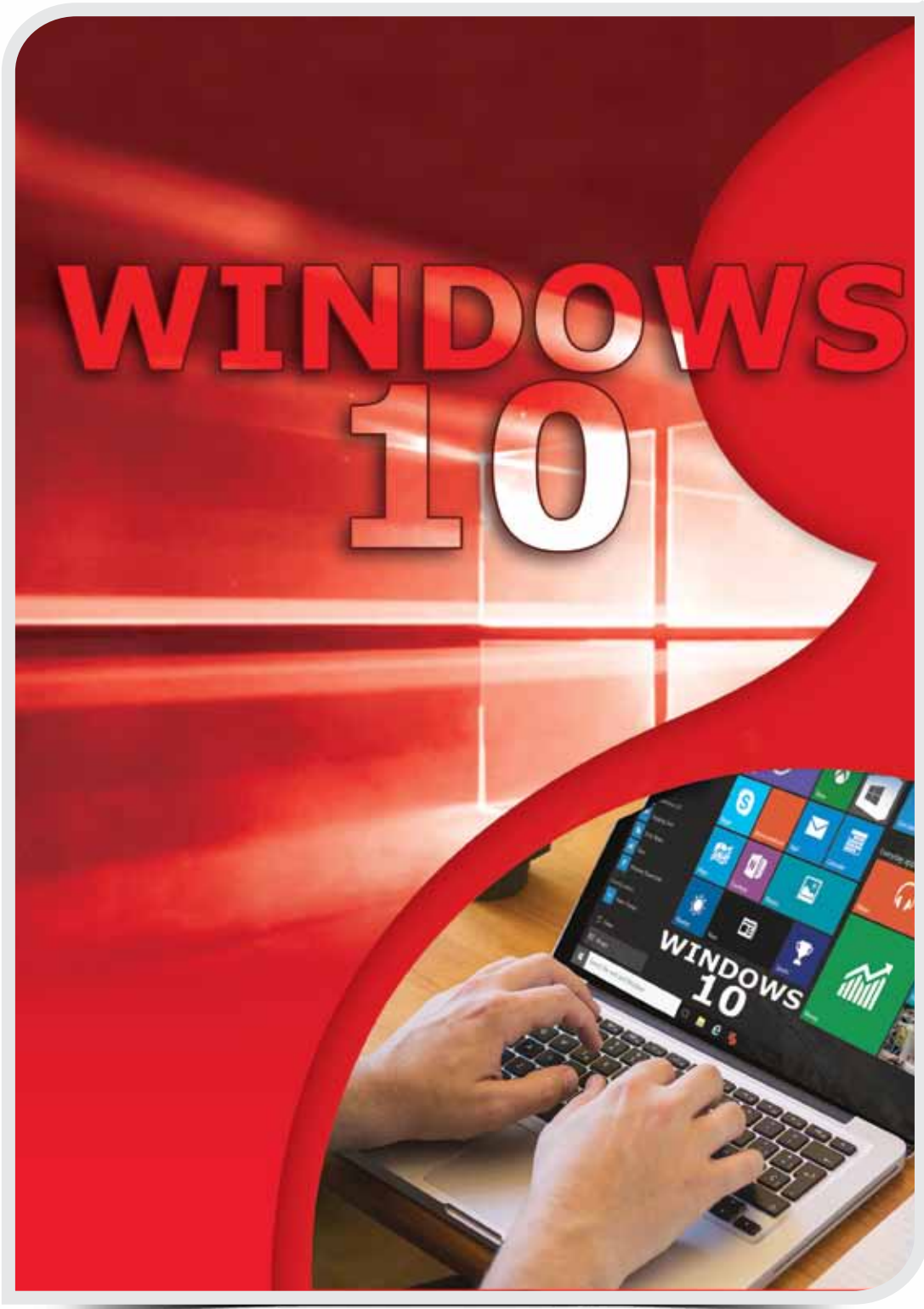
Session 4

OVERVIEW OF OPERATING SYSTEM, GETTING STARTED WITH WINDOWS 10 & EXPLORING WINDOWS 10

OBJECTIVES

General Objectives

In this session, you will learn about the Overview of Operating Systems and Getting Started with Windows 10.

Specific Objectives

At the end of this session, you should be able to understand and practice:

- **The Overview of Operating Systems**
  - System Software
  - Operating System(OS)
  - Popular Operating Systems

- **Getting started with Windows 10**
  - Introduction to Windows 10
  - New features of Windows 10

- **Exploring Windows 10**
  - Signing in to Windows 10
  - Exploring the Windows 10 PC Screen
  - Exploring the Taskbar
  - Exploring the New Start Menu
  - Exploring the Windows 10 Tablet Screen

LEARNING

OVERVIEW OF OPERATING SYSTEMS

In Module 1, you learnt that there are two types of Software; System Software and Application Software. In this section, you will learn about the System Software. Application Software will be discussed in detail in Module 3.

SYSTEM SOFTWARE

A software specially designed to Control and Manage hardware devices is called System Software. It is usually a collection of programs that handle technical details of computer operations. It mainly works in the background and requires little or no user interference.

Operating System is the most common System Software, which entirely controls and manages a computer system, such as **PC**, **Laptop**, **Tablet**, **Smartphone**, **etc**.

Another example of System Software is a **Device Driver** software, which controls the operations of a particular device, such as **Printer Driver** software.

OPERATING SYSTEM (OS)

An Operating System is like a backbone of a computer system. It controls and manages the entire operations of a computer. All computers, tablets and smartphones need an Operating System to function properly.

Windows 10, MAC and Android are common examples of Operating Systems.

MAIN FUNCTIONS OF OPERATING SYSTEM

Every computer has an Operating System that performs a variety of tasks to manage and facilitate its operations. Some of the common functions of an Operating System are as follows:

Manage Resources

An Operating System coordinates all the resource (or devices) of a computer system such as; Memory, Processor, Storage devices, Monitors, Printers, etc. It also monitors system performance, scheduled jobs, provides security and starts up the computer.

Provide User Interface

While working on computers, mostly you interact with the Operating System that provides a way to control computers. The way you interact with computers is termed as the **User Interface.** Almost all newer operating systems use a **Graphical User Interface (GUI)**, which involves the use of a pointing device to point and select from the on screen graphical elements such as icons, buttons, menus, dialog boxes, windows, etc. GUI makes it easier to work on a computer, even for a novice user.

Many older operating systems use a character based interface called **Command Line Interface (CLI)**, which involves typing written commands to computers.
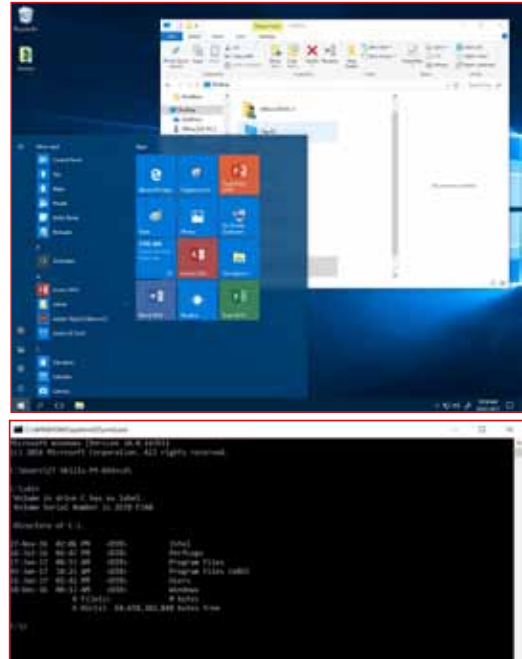
Run Applications

The Operating System loads and runs applications (or apps), such as Microsoft Edge or MS Word. Most Operating systems support multitasking, which allows to run multiple apps simultaneously and switching between them.
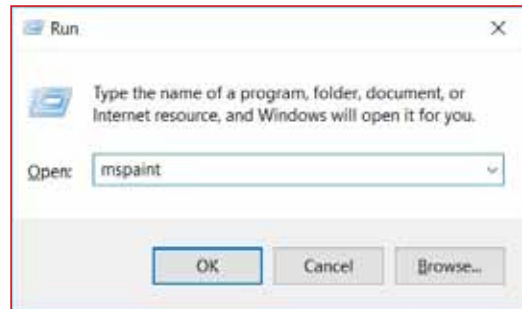
POPULAR OPERATING SYSTEMS

There are several Operating Systems developed by various Companies and Individuals. They are being used widely for Micro and Mainframe computers. Some of the popular Operating Systems in the world are as follows:

MICROSOFT WINDOWS

Microsoft's Windows is by far the most popular operating system for PCs. Most of the desktop applications are developed to run under windows as compared to any other OS. Windows comes in different versions and was initially designed to run with Intel or Intel-compatible processors.

Windows 10 is the latest release from Microsoft, which has a modern user interface and supports the tablet computing as well.

APPLE MACINTOSH (MAC)

Apple Macintosh, commonly known as **MAC OS,** is actually the first Operating System to provide the GUI. It is designed to run with Apple computers. It is not as widely used as the Windows OS; thus fewer applications have been developed to run on MAC OS. It is a powerful, easy-to-use operating system that is popular with professional graphic designers, desktop publishers, and many home users.

LINUX

Another famous name in the operating systems category is Linux. The specialty of Linux is that it's an **Open Source OS**, which means it is freely distributable. It can be customized and used with different types of computers, tablets or smartphones.

ANDROID

Android is one of the Linux based operating systems developed by **Google** and the Open Handset Alliance (OHA), a coalition of more than 30 hardware, software and telecom companies. It is designed primarily for mobile and touch screen devices such as Smartphones and Tablets. Android's User Interface is mainly based on touch gestures that correspond to real world actions, such as swiping, tapping and pinching along with a Virtual keyboard for text input.

Android is now the most popular **mobile OS** providing lots of exciting features. Its open nature has encouraged a large community of developers to develop android based applications (or apps). Thus, Google Play Store has over a billion of android apps.

GET STARTED WITH WINDOWS 10

By now, you have got a basic understanding of an operating system and information about the different operating systems available in the market. In this section, you will study and work with Windows 10 Operating System.

INTRODUCTION TO WINDOWS 10

Windows 10 is the latest version of Microsoft's Windows operating system. It is a major shift from the previous versions of Windows. It has been essentially modernized to support the touch devices and pen input. Lots of enhancements and useful new features have been added to it. The following parts will take you through the Windows 10 Operating System.

SIGNING IN TO WINDOWS 10

To interact with Windows 10, you need to first pass through a security gate – the Sign-In screen or Welcome Screen. You need to have a user account, which can be a local account that exists only on your computer or an online Microsoft account.

Usually, you have a Lock screen, when you turn ON or return back to your PC. To sign in to Windows, you need to dismiss the Lock Screen by clicking anywhere or pressing any key on the keyboard. You get the Welcome screen with the Username and Picture of the most recent user account in the center along with a Password entry box. A list of user accounts on the computer are shown in the lower left corner. You can click on any of these to choose and bring it to the center.
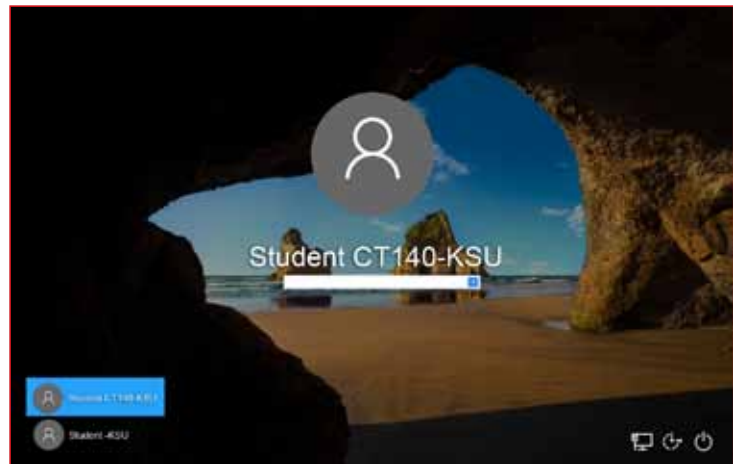
To Sign In, enter your password in the box below the account name and press Enter key (or click on the Arrow button to the right of the password box.)
If you have not set a password for your user account, a Sign in button will appear below your account name.

NEW FEATURES OF WINDOWS 10

Once you Sign in, you are in the all new Windows 10 environment. You should first go through the new features Microsoft has come up with. Some of the interesting and exciting new features of Windows 10 are as follows:

NEW START MENU

Windows 10 has a new Start menu. Microsoft has changed the Start Menu based on the experiences and feedbacks from the users. The Start Menu is now more comprehensive, efficient and modern.

The new Start Menu has a tile based Start screen along with the classic features of Start Menu. The tiles on the Start menu can display live contents making it an intuitive Start.

You can customize the new Start Menu right on its place, such as resizing tiles or start menu itself, and Pin or Unpin applications to Start Menu.

WINDOWS INK

As the world is moving towards the mobile and touch based computing, Windows 10 has introduced the Windows Ink feature. It allows you to use pen input in different apps or annotate on snapshot of your current screen.

If you have a touch screen device, the Windows Ink icon appears in the Notification Area of the Taskbar by default. Otherwise, to activate it, you need to Right-Click on the Taskbar and choose "Show Windows Ink workspace button."

When you click on Windows Ink icon, a side bar of the Windows Ink workspace appears, which usually has the following options:

A Sticky Notes: Allows you to create brief sticky notes by using pen tools such as adding a schedule reminder. Windows uses character recognition (or handwriting recognition) to read your sticky notes.

B Sketchpad: Enables you to create free hand drawings with pen tools and save it as an image file.

C Screen Sketch: Allows you to draw or annotate on snapshot of the current screen.

D Get More Pen Apps: You can click on "Get more pen apps" link to open the windows store and download desired pen apps.

TIP

If you don't have a touch screen device, you can't create handwritten Sticky Notes by using mouse.
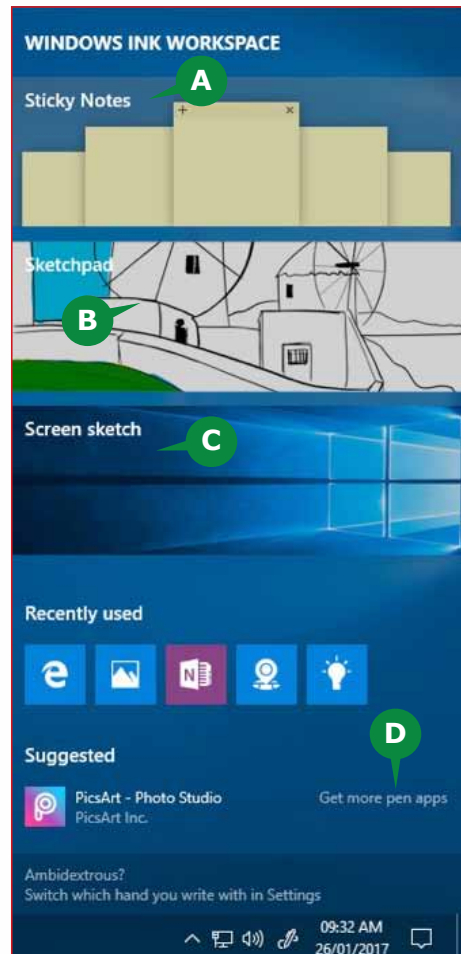
VIRTUAL DESKTOPS

Another useful feature Microsoft has provided with Windows 10 is the Virtual Desktops. This gives you the experience of working with multiple screens; although having just one.

So while you work on multiple apps, you can better organize them with multiple Virtual Desktops. You can group your personal apps together in one desktop and work apps in another. You can Add New Desktops as you want and switch between them easily.
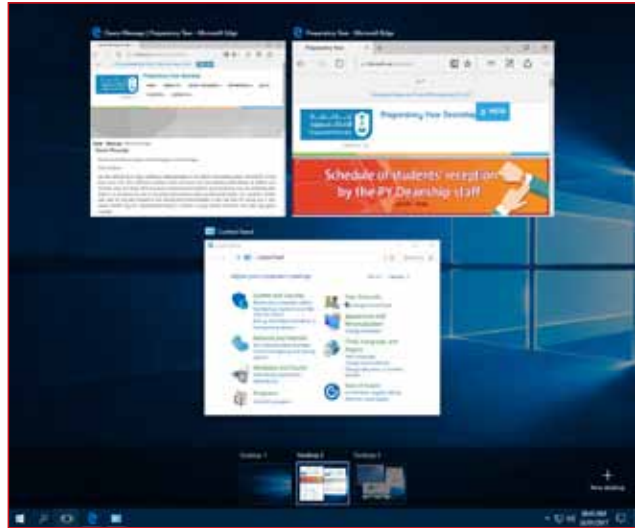
The Task View button on the taskbar helps you manage your Virtual Desktops. You can easily move running apps from one desktop to another with just the Right Click of the mouse.

Interestingly, if you close a Virtual Desktop, the apps that were running on it won't be closed, rather they will be shifted to the previous available desktop.

LOCK SCREEN

When you turn on your computer, the first screen you meet is the Lock Screen. It is a new style of Windows 10 to have a pleasant curtain over the Log In Screen. When your computer is locked, instead of just showing the boring Log In Screen, Windows 10 has made it more attractive and useful with the new Lock Screen.

Once you click or hit any key from the keyboard, the Lock Screen goes off and the Log In Screen appears, where you enter your credentials to get access to the computer.
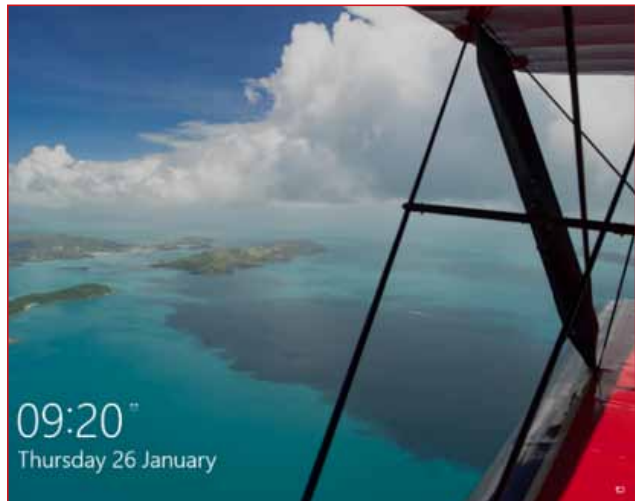
By default, the Lock Screen displays the system Time and Date. You can customize the Lock Screen in different ways.

Session 4

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NOTIFICATION & ACTION CENTER

Windows 10 provides you a new way to manage all your notifications in one place. The Notification and Action Center is the place where Windows 10 displays notifications about recent events on your computer.

These events can be an incoming email message, security alerts, updates and more. It collects alerts from apps and then smartly notifies you.

The Action Center also offers a quick way to toggle connectivity options and other settings such as display brightness and contrast.

CORTANA OR SEARCH

Cortana is another enhancement in Windows 10. Cortana is a voice-activated personal digital assistant, which provides relevant suggestions and alerts. The more you use Cortana, the more personalized your experience will be.

For example, you can use Cortana to find files/apps on computers, search the internet, send emails, help out with navigation, setting reminders, and more.

Cortana is available only in certain countries or regions. Cortana is accessible from the Search box at the taskbar right next to the Start button. You can command Cortana by either typing in the search box or by clicking on the mic button to talk to Cortana. You can also say "Hey, Cortana" to activate mic input for Cortana.

When Cortana is not available, it's replaced with the Windows Search, helping you to search for apps, files, folders, and settings on your computer.

EXPLORING WINDOWS 10

You are now ready to explore Windows 10 more closely. The topics in this section will help you to explore each user interface element of Windows 10, such as Desktop, Taskbar, and Start Menu.

EXPLORING THE WINDOWS 10 PC SCREEN

Once you Sign In, you land on the Windows 10 PC Screen. It is the place where you interact with Windows 10. It hosts the tools you use most often while working with your PC. Basically, the Windows 10 PC Screen has:
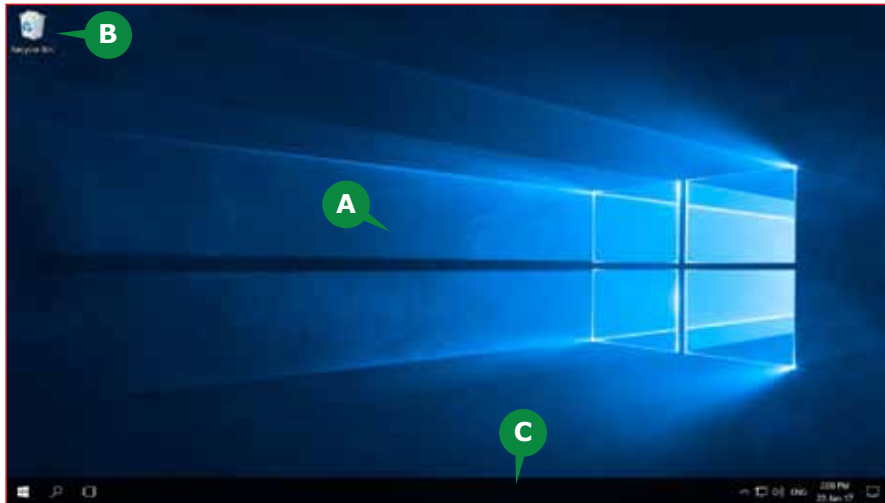
A **The Desktop:** The major part of the Windows 10 interface screen is the Desktop. As the name suggests, it is like your home or work desk, where you organize your stuff. Similarly, on Windows 10 Desktop, you can organize your files, folders or apps in the form of Icons.

You can personalize your Windows 10 desktop to suite your preferences, as you personalize your home or work desk. Thus, you can auto arrange Icons on the Desktop, change the Desktop Wallpaper, etc. You will learn to personalize the Desktop later in Session 5.

B **Icons:** The Desktop has several Icons. An Icon is a small graphical picture that is linked to a file, a folder, or an application. Double clicking an Icon opens the object it is linked with. If you want to place an Icon on your Desktop, you can drag it from its location to the Desktop.

By default, the Windows 10 desktop has a Recycle bin icon. The Recycle Bin is like a system folder on your computer. When you delete a file or folder on your PC, it is usually shifted to the Recycle bin. You can double click on the **Recycle bin icon** to open and manage its contents. The items you see in the Recycle bin cannot be directly opened or used, but they can be Restored to their original locations.

C The Taskbar: At the bottom of the Desktop, a wide horizontal bar, which has a Windows Start button to the left and time and date to the right is the Taskbar. The name Taskbar explains itself, it is the place where you keep track of all your running tasks.

EXPLORING THE TASKBAR

When you start a task in Windows 10, its icon appears on the Taskbar with an underline. For easy access, you can permanently pin an Icon to the Taskbar by right clicking on it. The icons without underline on the taskbar are the ones pinned but are not currently running.

Moving mouse pointer over an underlined Taskbar Icon shows a Snap of the current contents of the task window.

The contents of the Taskbar from the left are:

A Start Button: It allows you to open the Start Menu.

B Search button: It opens the Search box where you can Search for files, folders, apps or settings on your computer or interact with Cortana.

C Task View button: It opens the Task View display, which shows all the running tasks/ apps in small windows. It allows you to easily switch amongst the running tasks/apps. You can close an app directly in the task view as well.

The Task View is also the place where you can create and manage your Virtual Desktops.

Whereas, the right side of the taskbar has the Notification Area, containing:

D Notifications icon: It notifies you of the system and app events such as new emails arrived or system updates are installed. Clicking on the Notification icon opens the Notification and Action Center pane.

E Time & Date display: It shows the current Time and Date. Clicking on it displays the Calendar pane. To Adjust date/time of your computer, you can click right on the Time & Date icon. This will open the Date and Time settings.

F Active Language icon: It shows the currently active language. Clicking on it allows you to switch between available languages or to configure Language preferences.

Keyboard Shortcut to switch between available languages: Windows Key + Spacebar or Alt + Shift.

G **Sound icon:** It allows you to change sound level of your PC. You can click right on it to access different Sound settings.

H **Network icon:** It indicates the status of your network connection. Clicking it shows more information about your network connection and the Network settings option.

EXPLORING THE NEW START MENU

In Windows Operating System, the Start Menu is the main point of access to your Applications and Settings. As discussed, Windows 10 has a renewed start menu, which is a combination of traditional Start Menu and the tile based Start Screen.

OPENING NEW START MENU

You can open Start menu in multiple ways directly from any screen you are working on.

1 To open the Start Menu, Click on the Start button on the taskbar.

The new Start Menu can be categorized in to three sections as given below:

A Basic Start Menu: The left part of the Start menu contains the User Account icon, File Explorer icon, Settings icon, and Power button.

B All Apps List: Besides the basic Start Menu, there is a list of all apps available on your PC.

C Tile Based Start Screen: The right side of the new Start Menu has the whole new colorful tile based Start Screen. Tiles represents the apps you use frequently. Clicking on a tile opens the respective app or link.

TIPS

Keyboard Shortcut: *To open Start Menu press the* **Ctrl + Esc** *Keys.*	*Start Menu can be opened by pressing the* **Windows logo** *key on the keyboard from any Screen.*

THE BASIC START MENU

The basic Start Menu has the classic features so that you can have easy access to the basic operations such as opening the computer settings, lock, sign out, or shut down the computer.

By default, the basic Start Menu has:

A User Account Icon

B File Explorer Icon

C Settings Icon

D Power Button

User Account Icon

The User Account Icon shows which user is currently Signed In. It usually shows a picture for the User Account, if already set.

Clicking on the User Accounts Icon gives you following options:

E Sign Out: This allows you to close all your work , apps and sign out from your user account safely. If you have any unsaved file, Windows prompt you to save it.

F Lock: This allows you to take a break by keeping all your work and apps open in the same state and just lock the computer. So your work is private and safe. To return back and resume work, you need to sign in with your password (if you have set.)

G Change Account Settings: This allows you to open the Account's Settings, where you can Set or Change Picture for your User Account, Change Password, etc.
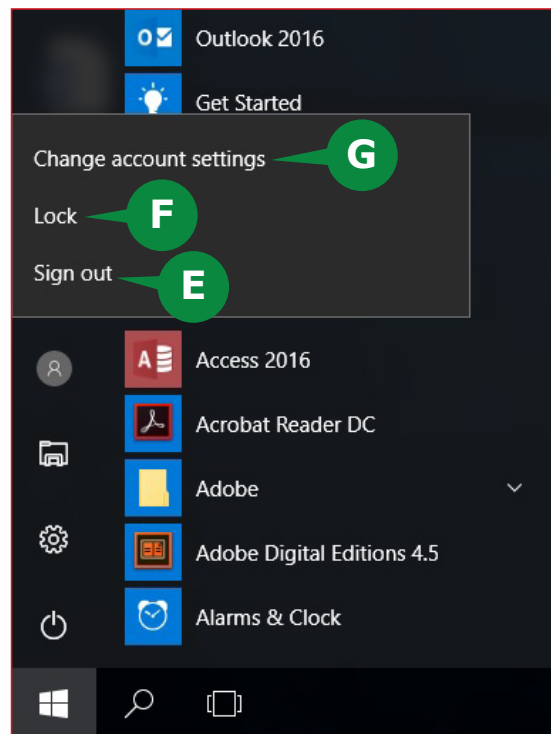
File Explorer Icon

The File Explorer Icon allows you to open the new Windows 10 File Explorer Application right from the Start Menu. The File Explorer Application is a modern file management tool in Windows 10, which allows you to organize all your files on your computer. Session 6 discusses the File Explorer Application in detail.

Settings Icon

The Settings Icon allows you to open the Windows Settings App. Windows 10 has a new approach to configure various settings of your computer. Windows Settings App provides an easy way to set your computer according to your preferences. It has Settings Categories such as Personalization, Accounts, etc. Personalization Settings are discussed in Session 5 and different Computer Settings are discussed in Session 6.

Power Button

As the name suggests, the Power Button allows you to Shut Down, Restart or put your computer to Sleep State.

Clicking the Power Button gives you the following options:

(A) Sleep: This allows you to put your computer to Sleep Mode. Sleep Mode keeps your work, files, apps active in its state, turns off the monitor and puts the computer in a Power Saving State. When you wake the computer up, the monitor turns on and Lock Screen appears. By signing in you can resume your work from the same state.

(B) Shut Down: This closes all open apps, files, processes, signs out all the users in an orderly manner and then turns off the computer.

(C) Restart: This shuts down the computer and starts it again. Restarting is sometimes necessary after installing Windows updates.
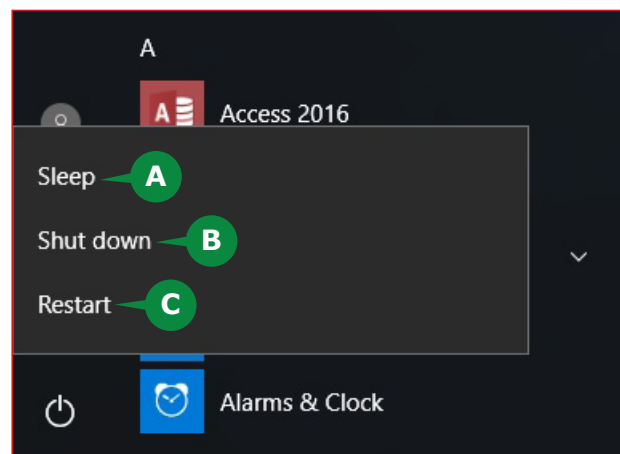
THE APPS LIST

The All Apps List provides access to all of the apps available on your PC. This include the apps installed as part of Windows 10 and the apps you have installed.

The All Apps List has the following:

A Recently added: The apps that are recently installed are listed here.

B Most used: The apps that you use most are listed here. The list is updated based on your usage of apps.

C Alphabetical apps list: This presents all the apps available on the PC in alphabetic order allowing you to quickly locate the apps.

To open an app, scroll the All Apps List to locate the app and click on it. The app opens in its window. If an app has multiple tools or there is an apps suit, a small arrow is shown next to it.

TILE BASED START SCREEN

The Tile Based Start Screen is inspired from the tablet and touch based computing interface. Tiles can be considered as replacement for Icons in the tablet or touch based interfaces. Tiles are more attractive and visual than icons. Thus, Windows 10 has integrated the tile based screen along with the standard features of the Start menu.

Tiles can display contents from an app it is representing or can show live contents.

By default, the tiles have two groups on the Start screen, **Life at a glance** (having tiles of apps, such as Calendar or Weather) and **Play and explore** (having the tiles of apps, such as Games or News).

You can drag the tiles in Start screen, Resize or Turn live tile off. You can Unpin a tile or Pin more new tiles for your apps.

Pin Tiles to Start Screen

To pin an app to the Start screen, follow the steps given below:

1 Open the Start menu.

2 Locate the app in the All Apps list and Right Click on it.

3 Choose Pin to Start in the shortcut menu that appears.

Unpin Tiles from Start Screen

To Unpin a tile from the Start screen, follow the steps given below:

4 In the Start Menu, Right Click on the tile you want to Unpin.

5 Choose Unpin from Start in the shortcut menu that appears.

Resize Tiles

Tiles can be square or rectangular in shape. You can resize tiles to be Small, Medium, Large, or Wide.

To resize a Tile, follow the steps given below:

1 In the Start Menu, Right-click on the tile you want to resize.

2 Point to the Resize option in the shortcut menu that appears.

3 Choose the desired size for the tile.

Resize Start Menu

Windows 10 allows you to resize the Start Menu easily right there. You can adjust the height and width of the Start menu. Resizing the Start menu can move the app tiles from their positions.

To change the width or height of the Start menu, follow the steps given below:

4 Open the Start Menu, Point to the right border (or the top border) of the Start Menu.

5 The mouse pointer changes to a two-headed arrow, Drag the border to resize the Start menu as desired.

EXPLORING THE WINDOWS 10 TABLET SCREEN

Microsoft is highly focused in incorporating mobile and touch based features into Windows, in order to meet and exceed user requirements. The recent versions of Windows have shown major shifts in this direction. In Windows 10, it has been given a dual mode interface – Desktop mode and the Tablet mode.

Session 4

If you are using Windows 10 on a touch based PC or on a tablet, it will automatically load into the tablet mode. The Tablet mode is specially designed to navigate and launch items by using touches and gestures. In tablet mode, most of the Windows interface components will be more visual and user friendly. You might find using the new interface difficult at first. However, a little practice makes it more enjoyable. The Tablet mode screen is briefed here.

A Tile Based Start Screen: In the tablet mode, the Tile Based Start Screen takes the whole screen and you don't see the desktop as in the desktop mode. As discussed, it has the tiles of the apps you use frequently. Whenever you close an app, you usually come back to this screen. Thus, in tablet mode, the Tile Based Start Screen becomes like your desktop.

You can pin or unpin tiles as you do in the desktop mode.

B Basic Start Menu: The Basic Start Menu in the tablet mode remains almost same as in the desktop mode, except the All Apps icon is added to it on top. You need to click on it to see your apps. The All Apps list is also tile based now, instead of a simple list of All Apps as in desktop mode.

C The Back Key: Another important change in the tablet mode is the Back Key. Usually you use this key to return to either the previous app or to the Start Screen.

TOGGLE TABLET MODE ON/OFF

If you have the mouse and keyboard connected and would like to work in the classic way, you can switch the Tablet Mode OFF and return to the Desktop mode.

To toggle the Tablet mode ON/OFF, follow the steps given below:

1 Click the Notifications and Action Center icon to open the Action Center.

2 Click on the Tablet mode option.
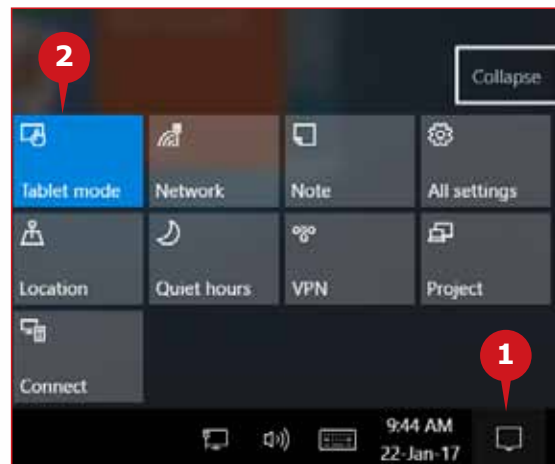
ACTIVITIES

Activity 1

Choose the correct option for the following statements.

1. Which one of the following is not an Operating System?

    a. Microsoft Word.

    b. Android

    c. Windows 10

    d. MAC OS

2. _____ is a character-based interface, which involves typing written commands to computers.

    a. Graphical User Interface

    b. Command Line Interface

    c. Graphical Line Interface

    d. User Command Interface

3. The_____displays notifications about recent events on your computer such as incoming email messages, security alerts, updates, etc.

    a. Action Center

    b. Task view

    c. Windows Ink

    d. Virtual Desktops

4. _____ allows you to use pen input in different apps or annotate on snapshot of your current screen.

    a. Action Center

    b. Windows Ink

    c. Task View

    d. Virtual Desktops

Activity 2

Fill in the blanks with the appropriate words provided in the box.

Back Key	Windows Key + L	Lock Screen	Icon	Ctrl + Esc

1. An_____ is a small graphical picture on the desktop that is linked to a file, a folder or an application.

2. The keyboard shortcut to open the Start Menu is _____.

3. _____ is the screen that appears when you turn on your computer or when your computer is locked.

4. In the Tablet Mode, you use the _____ to return to the previous app or to the Start Screen.

Activity 3

Practice the following tasks on your computer.

1. Pin the Calculator app to the tile based start screen. (Hint: Pin it to the right side of the Start Menu.)

2. Open the Start Menu and resize the Microsoft edge tile to large size. (Hint: From the tile based start screen.)

3. Unpin the Mail app tile from the tile based start screen. (Hint: From the tile based start screen.)

4. Put your computer to sleep mode. (Hint: From the power button of the start menu.

Session 5

PERSONALIZING WINDOWS 10 AND MANAGING CONTENT & APP WINDOWS

OBJECTIVES

General Objectives

In this Session, you will learn about Personalizing Windows 10 and Managing Content and App Windows.

Specific Objectives

At the end of this Session, you should be able to understand and Practice:

- **Personalizing Windows 10**
  - Personalize the Desktop
  - Themes
  - Personalize the Lock Screen
  - Personalize the Start Menu
  - Personalize the Taskbar

- **Managing Content and App Windows**
  - A Window and an Active window
  - Common Characteristics of windows
  - Arranging Multiple windows
  - Switching between windows

LEARNING

PERSONALIZING WINDOWS 10

Having explored the Windows 10, you might be excited with the pleasant design and colors it has by default, or you might want to customize it to your own preferences.

Windows 10 offers great personalization options for your windows environment. You can personalize the **Desktop, the Start Menu**, the **Taskbar,** and even the **Lock Screen.** Now you will go through the Personalization options in windows 10.

PERSONALIZE THE DESKTOP

As discussed, you use the Windows 10 Desktop as your personal desk. Windows 10 Desktop is the place you see often while you work on your PC. Therefore, it's a good idea to personalize your desktop the way you wish.

You can personalize your desktop in many ways such as **Resizing Icons, Arranging Icons, or Changing the Desktop Background.**

RESIZING DESKTOP ICONS

Windows 10 provides three views for the desktop icons; **Large icons**, **Medium icons** and **Small icons.**

To change the view of the Desktop Icons, follow the steps given below:

1. Right Click on an empty area of the desktop, the shortcut menu appears.

2. Point to View option.

3. Choose the desired view option for the icons from the menu that appears.
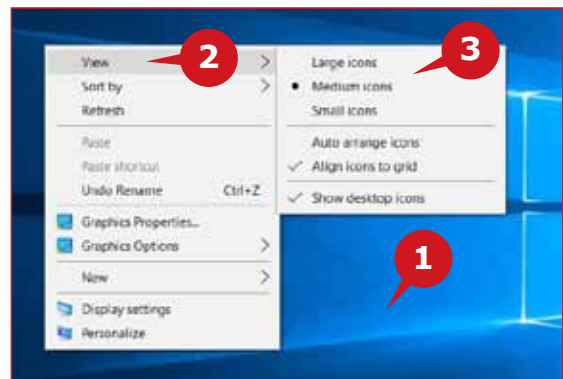
ARRANGING ICONS(SORT BY)

To have a decent desktop, you should arrange the icons on it. This also makes it easier to access them. You can arrange icons manually by dragging icons as you want or you can let windows arrange (or Sort) it automatically.

You can also choose to sort icons automatically by their Name, Size, Item type or Date modified.

To automatically sort the desktop icons, follow the steps given below:

1 Right Click on an empty area of the desktop, the shortcut menu appears.

2 Point to Sort by option.

3 Choose the desired sort option from the menu that appears.
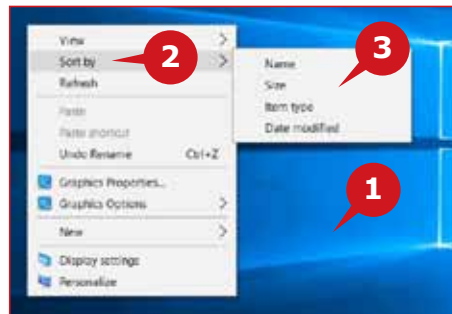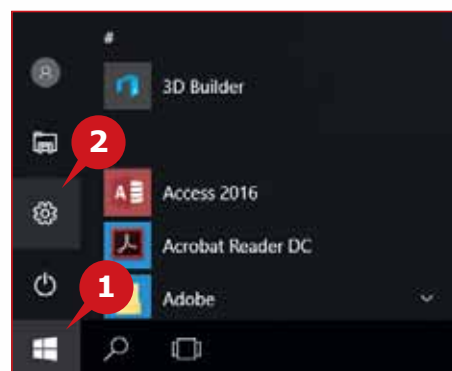
PERSONALIZE THE DESKTOP BACKGROUND

The appearance of desktop background is usually important. As discussed, you often return back to the desktop while working on a PC. A cheerful desktop makes you feel excited.

Open Personalization Settings

You can personalize the desktop background from the Windows Personalization Settings.

To open the Personalization Settings, follow the steps given below:

1 Click on Start Button.

2 Click on Settings icon in the Start menu. This opens up the Windows Settings.

3 Click on the Personalization category.

A The Personalization Settings window appears.

In Windows 10, you can personalize your desktop background by choosing a Picture, a Solid color, or a Slideshow of pictures.

TIP

Keyboard Shortcut: *You can also open the Personalization Settings by by right-clicking on the desktop and choosing Personalize.*

Set a Picture as Background

If you prefer to have a picture as the desktop background, you can choose a picture from the default pictures provided by Windows 10 or you can browse your computer to locate the picture.

To set a Picture for your desktop background, open the Personalization settings and follow the steps given below:

1 Click the Background option in the Personalization pane on the left.

2 Click the Background menu in the right and choose Picture option from the list that appears.

3 Choose a picture from the pictures shown under the Choose your picture.

B The preview of the selected picture appears in the Preview area.
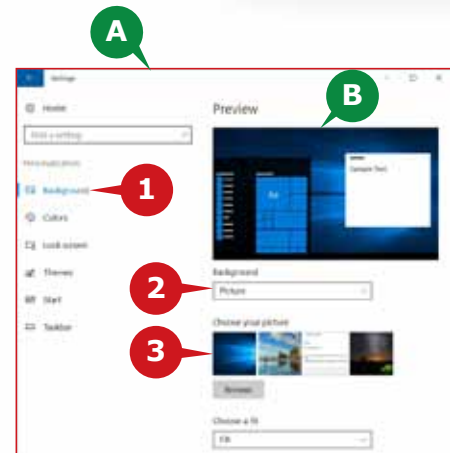
TIPS

If you want to choose a picture from your computer, click on Browse button, the file Open dialog box appears. Locate and select your picture and click on the Choose Picture button.

You can also right-click on the picture file and select Set as desktop background.

Set a Solid Color as Background

If you prefer to have a simple desktop Background, you can choose a Solid color from a variety of available colors.

To set a Solid color for your desktop Background, open the Personalization settings and follow the steps given below:

1 Click on the Background option in the Personalization pane on the left.

2 Click on the Background menu in the right and choose Solid color from the list that appears.

3 Choose a color of your choice from the Background colors grid that appears below.

**C** Preview of the selected color appears in the Preview area.
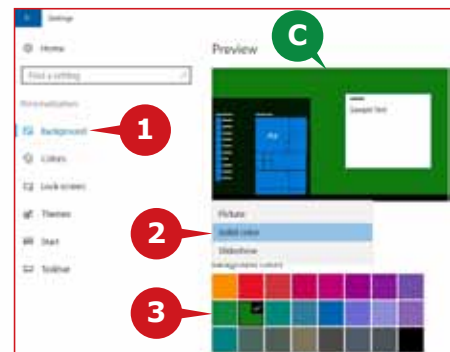
Set a Slideshow as Background

If you want the desktop background picture to be changed automatically after a specific time period, you can choose the Slideshow option for your desktop background. This is quite an exciting feature, which gives you a beautiful new desktop background, every morning, for example.

All you have to do is organize all your favorite pictures into a folder and set it as a source for the Slideshow.

To set a Slideshow for your desktop Background, open the Personalization settings and follow the steps given below:

1 Click on the Background option in the Personalization pane on the left.

2 Click on the Background menu in the right and choose Slideshow from the list that appears.

3 Click on the Browse button to locate the pictures folder. The Select Folder dialog box appears.

4 Locate and select the pictures folder and click on the Choose this folder button.

5 Click on Change picture every box and choose how often you want the pictures should be changed in the slideshow.
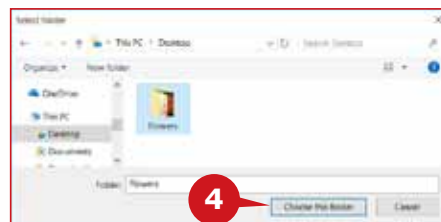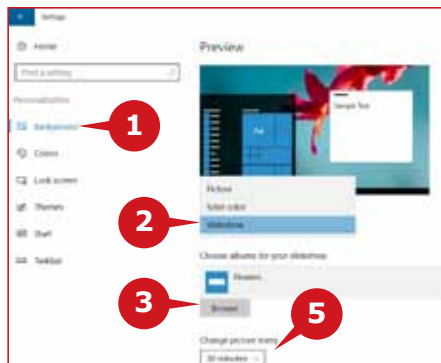
TIP

You can set the Shuffle option ON to display the pictures in the Slideshow in random order.

THEMES

The Themes option in Personalization settings allows you to change the appearance of various user interface elements of Windows at once. A Theme is like a personalization package containing the desktop backgrounds, colors, screen savers, and even system sounds. Applying a theme instantly changes the look and feel of the Windows environment.

To change the Theme, open the Personalization settings and follow the steps given below:

1 Click Themes option from the Personal -ization pane in the left.

2 Click Theme settings link under the Themes option in the right. This opens up the Theme settings window.

3 Choose a Theme of your choice from the available themes.
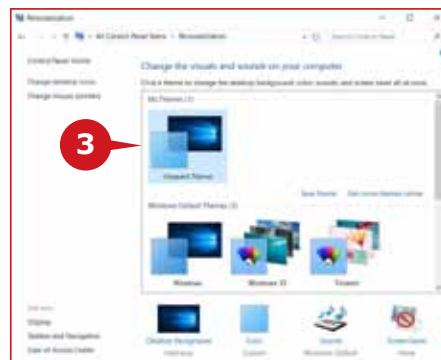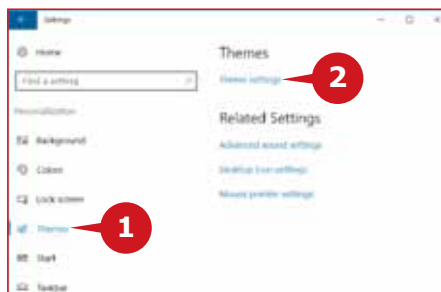
TIP

*The link "**Get more themes online**" allows you to download more themes from the Microsoft website.*

PERSONALIZE THE LOCK SCREEN

You learned about the new Lock Screen feature of Windows 10 in session 4. You can also personalize the Lock Screen with various options.

You can set a Picture or a Slideshow on the Lock Screen in the same way you do it for the desktop background i.e., from the Personalization settings.

Additionally, you can show the status of different apps right on the Lock Screen. Getting the status of apps right on the Lock screen makes it beneficial, so you can decide whether or not you should unlock and pay immediate attention. There are two types of app status on the Lock Screen: **detailed status** and **quick status**.

TIP

Windows 10 allows you to show detailed status of any one app and quick status of up to seven apps on the Lock Screen.

SHOW DETAILED APP STATUS ON LOCK SCREEN

Setting an app to show detailed status on the Lock Screen gives a bit more information from the app. For example, the detailed status of Calendar app shows the upcoming event details which includes the event title, location, time, etc.

To set an App to show detailed status on Lock Screen, open the Personalization settings and follow the steps given below:

1 Click Lock Screen option from the Personalization pane in the left.

2 Click on the icon under the Choose an app to show detailed status; the list of supported apps appears.

**3** Choose the app of your choice to show the detailed status.

SHOW QUICK APP STATUS ON LOCK SCREEN

The **Choose apps to show quick status** option from the Settings app displays the app icons for the new notifications on the Lock Screen. The count of the notifications is also displayed on the app icon, which is called **badges** of the apps. For example, quick status of email app shows just the number of new emails arrived.

To set an App to show quick status on Lock Screen, open the Personalization settings and follow the steps given below:

1 Click **Lock Screen** option from the Personalization pane in the left.

2 Click on any of the plus sign icon or existing app icon under the **Choose apps to show quick status.** The list of supported apps appears.

3 **Choose the app** of your choice to show the quick status.
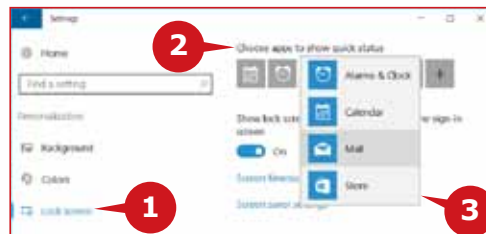
PERSONALIZE THE START MENU

In Session 4, you explored the new Start Menu of Windows 10 along with some quick and handy customizations, such as resizing tiles.There are a lot more customization options that Windows 10 offers for the Start Menu. You can choose which folders to appear on the Start; whether to show Most Used apps, Jump lists, or to show the full screen Start Menu as in the tablet mode.

The Settings app of Windows 10 has made configuring the Start menu quick and simple, by providing the ON/OFF toggle buttons for most of the options. Moreover, various Start menu settings can be configured from the same settings page.

To personalize Start menu contents, open the Personalization settings and follow the steps given below:

1 Click on the **Start** option in the Personalization pane in the left.

A The Start Menu settings appear in the right.

2 **Show more tiles:** Turn this option ON if you want to make the Start screen a bit wider to occupy more tiles.

3 **Show most used apps:** Turn this option ON to see a list of apps you use most but are not pinned to the Start screen, at the top of the All Apps list.

4 **Show recently added apps:** Turn this option ON to see a list of recently installed apps, at the top of the All Apps list.

5 **Use Start full Screen:** Turn this option ON to see the full screen Start Menu as in the tablet mode.

6 **Show recently opened items in Jump Lists on Start or the Taskbar:** Turn this option ON to show the list of recently opened items in an app as a Jump list so that you can right-click and reopen it directly.

7 **Choose which folders to appear on start:** Clicking this option opens a list of folders with ON/OFF toggle buttons. You can turn any folder ON to have it right in the basic start menu for direct access.

Session 5

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PERSONALIZE THE TASKBAR

You learned about the importance and working of the Windows 10 taskbar in session 4. You can personalize the taskbar in many ways such as locking, automatically hiding, or changing its location on screen.

Windows 10 has also simplified the Taskbar personalization by providing it all together at one place and in the form of ON/OFF toggle buttons for most of the options.

To personalize the Taskbar, open the Personalization settings and follow the steps given below:

1 Click on the Taskbar option in the Personalization pane in the left.

A The Taskbar settings appear to the right.

2 Lock the Taskbar: Turn this option ON if you want to prevent any accidental relocation or resizing of the Taskbar.

3 Automatically hide the taskbar in desktop mode: Turn this option ON if you don't want the taskbar to be always visible. Instead, it will appear only when you move your mouse pointer over the taskbar location

4 Use small taskbar buttons: Turn this option ON if you want the buttons on the taskbar to be a bit smaller. This reduces the size of the taskbar as well.

5 Show badges: Turn this option ON if you want to get the count of any new notifications from a running app directly on its taskbar button.

6 Taskbar location on screen: Click on this option to change the location of the taskbar on your screen. Choose the desired location from the list that appears with the following options:
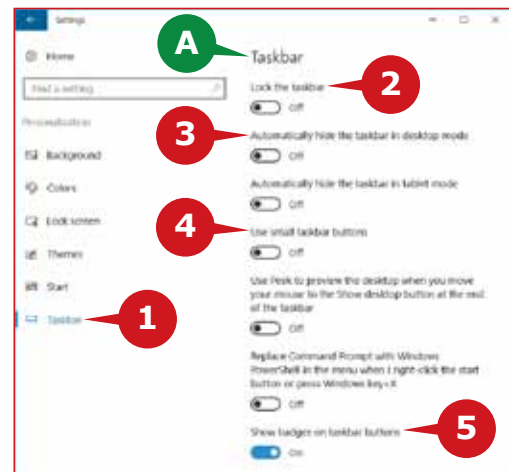
TIPS

- *You can also open the Taskbar Settings by right-clicking on the Taskbar and choose Settings.*
- *You can also lock the Taskbar by right-clicking on it and choose Lock the taskbar.*
- *You can also drag the taskbar to move it to any edge of your screen, if it's not locked.*

B **Left:** To move the taskbar to the left edge of the screen.

C **Top:** To move the taskbar to the top edge of the screen.

D **Right:** To move the taskbar to the right edge of the screen.

E **Bottom:** To move the taskbar to the bottom edge of the screen.

7 **Combine taskbar buttons:** Click on this option to choose whether to combine the buttons on the taskbar for the apps that are having multiple open windows. This allows you to occupy more buttons on the taskbar. Choose when to combine the taskbar buttons from the list that appears with the following options:

F **Always, hide labels:** To always combine the taskbar buttons for the apps. This also hides the labels of all the apps on the taskbar buttons.

G **When taskbar is full:** To only combine the taskbar buttons for the apps when the taskbar is full of buttons.

H **Never:** To not combine the taskbar buttons even if the taskbar is full of buttons.

8 **Select which notification icons appear on taskbar:** Click on this option to choose which icons you want to appear in the Notification area of the Taskbar. Particularly, you can choose icons of the apps running in background such as Windows defender.

I Choose the desired icons from the list of options that appear in a new settings window.

9 **Turn System icons ON/OFF:** Click on this option to choose which system icons you want to appear in the Notification Area of the Taskbar, such as the Clock, Volume, or Network.

**J** Choose the desired icons from the list of options that appear in a new settings window.
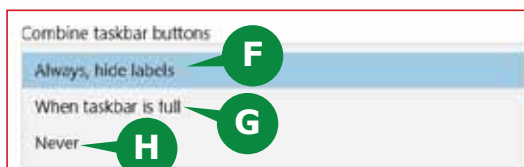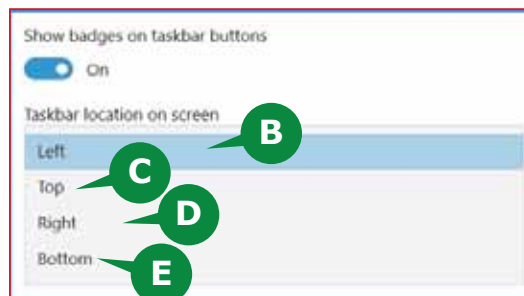
MANAGING CONTENT AND APP WINDOWS

While working on your computer, almost all the information you view on your computer screen is displayed in a Window. As you have seen, the various personalization settings are displayed in the Settings window. Similarly, user files open in the respective app windows. Usually, you have multiple windows open while you work on your PC. This section enables you to handle multiple windows efficiently.

A WINDOW AND AN ACTIVE WINDOW

A window is a rectangular frame that displays apps, files, folders, or other contents. As discussed, multiple windows are usually open simultaneously while you work. The window you are currently working in is called an Active Window. For example, if you are currently browsing a website in Microsoft Edge, it is your active window.
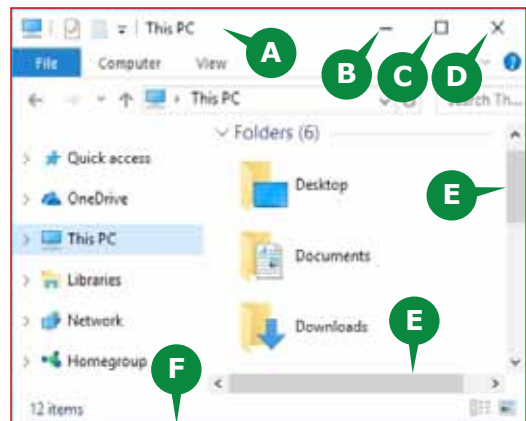
COMMON CHARACTERISTICS OF WINDOWS

The contents of every window are usually different but all windows have some common characteristics. All windows can be opened, closed, minimized, maximized, and resized. In addition, most of the windows have some basic parts, as follows:

A Title Bar: It is the area at the top of a window that displays the title of an app. It also displays the title of the file, which is open in the window.
You can drag the Title bar to move a window on the screen.

B Minimize button: This button is at the right end of the title bar. It minimizes a window to the taskbar, i.e. the window disappears from the screen. You can re-open the same window from the taskbar.

TIPS

You can Minimize all windows other than the active window by dragging and shaking its Title bar, or by using the keyboard shortcut **Windows Key+ Home.** To minimize all windows, the keyboard shortcut **Windows Key+ M** can be used.	You can also use the Title bar to Maximize or Restore a window as shown below: -To maximize, **double click** or **drag the Title bar** to the top of the screen. -To restore, double click or drag the Title bar away from the top of the screen

C Maximize/Restore button: This is next to the minimize button on the window title bar. Maximize resizes the window to full screen and Restore returns the window to its previous size.

D Close button: Next to the maximize button is the Close button.

It closes the window along with the file, or any other contents.

E Scroll Bar: Scroll bar is used to move vertically or horizontally to change the position of the content within a window. For example, you use vertical or horizontal scroll bars to move through a window.

F Window Border: The outer edges of a window, which specifies area of the window on the screen. The Window borders can be used to resize a window as well. Take the mouse pointer on any border of the window, the pointer changes to a two-headed arrow. Drag the border horizontally or vertically to resize the window as desired.

ARRANGING MULTIPLE WINDOWS

When you have multiple apps running simultaneously, you might wish to arrange all the app windows at once. Windows 10 allows you to automatically arrange all running app windows in three ways; cascade, stacked, or side by side.

CASCADE WINDOWS

This arrangement shows multiple open windows overlapped one over the other.

To cascade Windows,

1 Right click on empty area of the Taskbar and choose the Cascade windows option from the menu that appears.
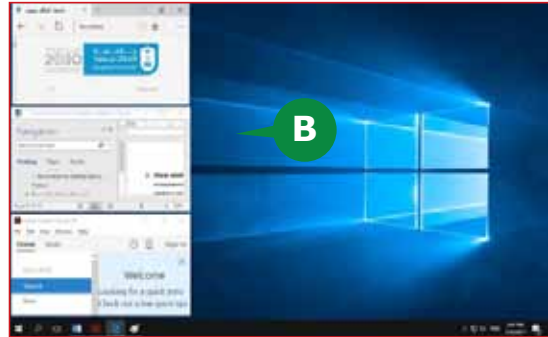
A All open windows are cascaded.
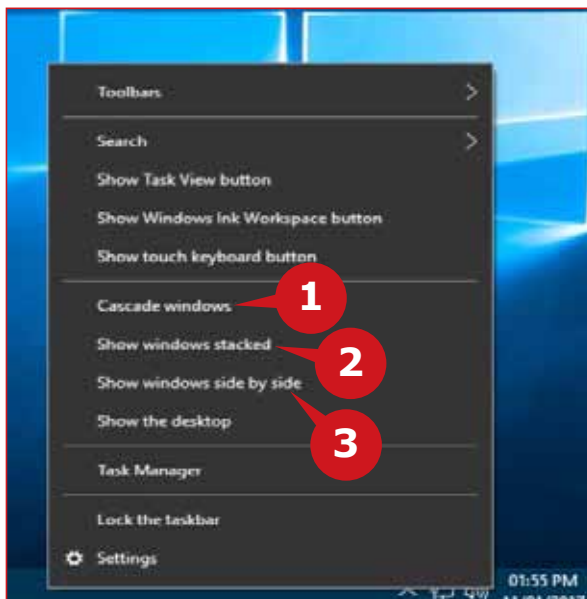
SHOW WINDOWS STACKED

This arrangement shows the multiple windows one above the other.

To show Windows stacked,

2 Right click on empty area of the Taskbar and choose Show windows stacked option from the menu that appears.

B All open windows are stacked.

SHOW WINDOWS SIDE BY SIDE

This shows multiple windows arranged side by side.

To show Windows side by side,

3 Right click on empty area of the Taskbar and choose Show windows side by side from the menu that appears.

C All open windows are displayed side by side.

Restore cascaded, stacked or side by side windows

After you have arranged multiple windows on your screen, you can restore them to their previous status by choosing the relevant Undo command.

1 To Restore the window arrangement, right click on empty area of Taskbar and click the relevant Undo command from the menu that appears.
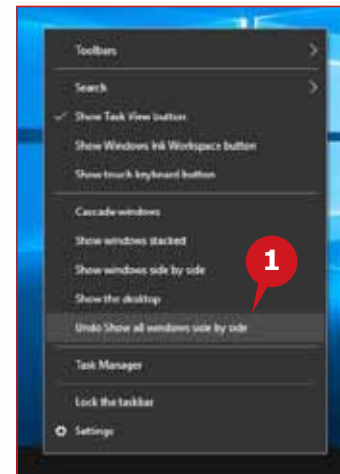
SNAP A WINDOW TO THE LEFT OR RIGHT OF A SCREEN

Windows 10 includes several enhancements to snap, making it easier to manipulate the layout of an open window on your screen. Snapping a window to left or right side actually resizes and positions a window to occupy either left or right portion of the screen or one corner of the screen.

1 To snap window to left half of the screen, drag the window Title bar until the mouse pointer touches the left or right edge of the screen (A circle flashes around mouse pointer) and Release.

TIP

To snap a window to a quarter screen, drag the window title bar until the pointer touches a corner of the screen and release.


SWITCHING BETWEEN WINDOWS

You can cycle through different windows that are open on your screen or minimized to Taskbar. To switch between windows, you can use the Task View button on the taskbar.

Using the Task View button

The main function of the Task View button is to provide easy switching amongst the different open windows.

To switch between windows using task view button, follow the steps given below:

1 Click Task View button on the taskbar.

A Windows displays thumbnails for all running programs.

2 Click the thumbnail of the program that you want to switch to.
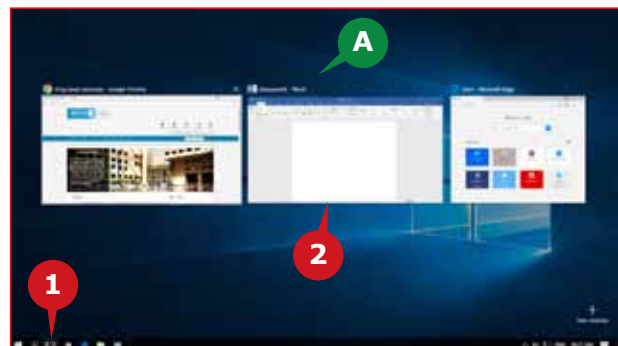
Using ALT + TAB Keys

You can also switch among the open windows easily with the ALT + TAB keys as follows:

- Press and hold the ALT key.
- Hit the TAB key once, You will see the thumbnails of the open programs.
- Hit the TAB key again to choose the window you want to switch to.
- Release the ALT key to show the selected window.

ACTIVITIES

Activity **1**

Choose the correct option for the following statements.

1. Windows 10 provides _____ views for the desktop icons.

    a. 4

    b. 3

    c. 2

    d. 1

2. To make the Start screen a bit wider to occupy more tiles, turn on _____ option in the Start menu settings.

    a. Show most used apps

    b. Show more icons

    c. Show more tiles

    d. Show recently added apps

3. The _____ button is used to switch between different windows.

    a. Start menu

    b. Action center

    c. Title bar

    d. Task view

4. The keyboard shortcut to minimize all windows including the active window is _____.

    a. ALT + M

    b. Windows key + M

    c. CTRL + M

    d. ALT + T

Activity 2

Session 5

Fill in the blanks with the appropriate words provided in the box.

Lock Screen	Active Window	Window Borders	Theme	Task View

1. _____ is like a personalization package containing the desktop background design, colors, sound schemes, etc.,

2. Windows 10 allows you to show detailed status and quick status of apps on the _____.

3. The window you are currently working in is called an _____.

4. _____ are the outer edges of a window, which specifies its area on the screen.

Activity 3

Practice the following tasks on your computer.

1. Change the background picture of your desktop. (**Hint:** Choose the picture from available windows 10 pictures.)

2. Set a slide show for your desktop background. (**Hint:** Choose a folder of your choice that contains pictures)

3. Change the lock screen background picture. (**Hint:** Choose the picture from available windows 10 pictures.)

4. Open any three applications on your desktop and arrange all opened windows to "Show windows side-by-side". (**Hint:** Open Microsoft Edge, File Explorer and Notepad applications.)
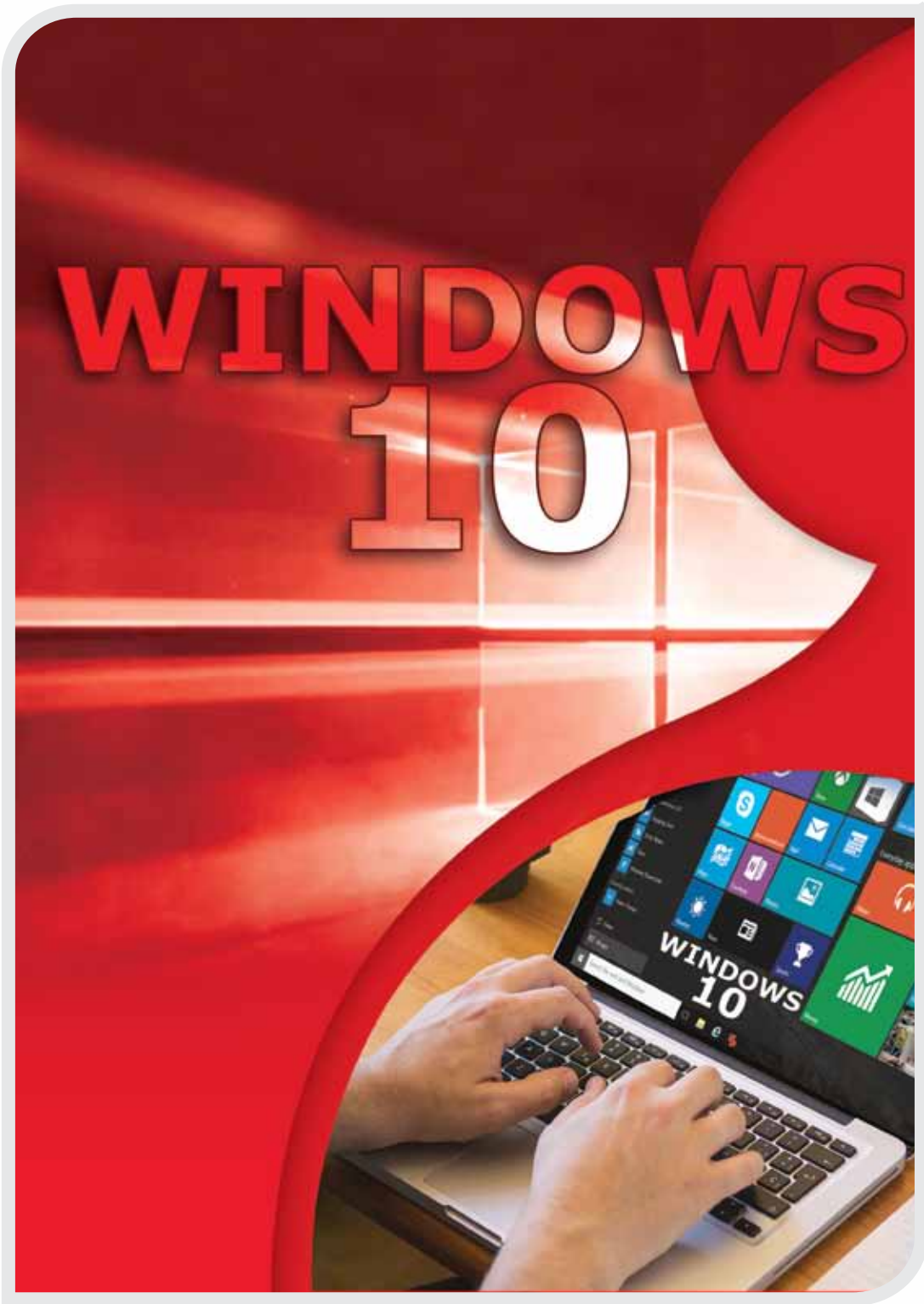
Session 6

MANAGING FILES & FOLDERS AND COMPUTER SETTINGS

OBJECTIVES

General Objectives

In this Session, you will understand Managing Folders & Files and Computer Settings.

Specific Objectives

At the end of this Session, you should be able to understand and Practice:

- **Managing Files and Folders**
  - Understand Files, Folders, and Libraries
  - File Explorer of Windows 10
  - The Home Tab
  - The View Tab

- **Managing Computer Settings**
  - Time & Language Settings
  - System Information
  - Task Manager

LEARNING

MANAGING FILES AND FOLDERS

Windows 10 organizes the files in a hierarchical storage system of folders and subfolders. To organize your files well, Windows 10 provides the File Explorer app. This section explains working with the File Explorer app of Windows 10.

UNDERSTANDING FILES, FOLDERS, AND LIBRARIES

Files and Folders play a major role in the organization of data in your computer. Before you work with the File Explorer app, you should understand the basic concept about Files, Folders and Libraries.

FILE

A **file** is a collection of related data or information stored in a computer; identified by a name. It can be a document, worksheet, graph, text file, presentation, audio clip, video clip, etc. You can open, look at and change files by using one or more apps.

FOLDER

A **folder** is a container in which you can store files and folders. A folder within a folder is called a **sub-folder**. Many apps install the files they need in subfolders of the **Program Files** folder.

LIBRARY

Libraries allow you to access and arrange files from different folder locations quickly without moving them from their original location. The default libraries in Windows 10 are **Documents, Music, Pictures, Videos, Camera Roll and Saved Pictures.**

FILE EXPLORER OF WINDOWS 10

File Explorer is the file management application used by Windows 10 to browse folders and files. It provides a graphical interface for the users to navigate and access the files stored in the computer. If you are looking for a specific document in your computer use the File Explorer to locate it.

To start the File Explorer, click on its icon in the Start Menu.

The File Explorer window opens up and you can browse all folders and files on your computer.

TIP

To open File Explorer press: **Windows key + E.**

THE USER INTERFACE OF FILE EXPLORER

You should first get familiar with the user interface of the File Explorer so that it will be easier for you to understand and practice its features. As you can see, the initial window of the File Explorer comprises of the following sections:
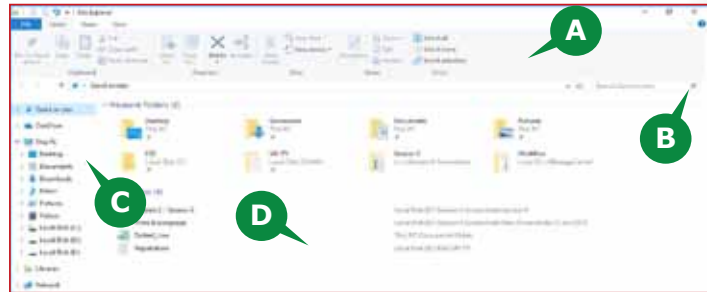

A Ribbon: The File Explorer includes the Ribbon at the top. The Ribbon contains buttons for the common tasks you perform with your files and folders.

B Navigation and Search Bar: Just below the Ribbon, it lets you navigate through the folder structure easily and search files or folders.

C Navigation Pane: The Pane on the left, gives you easy access to storage structure of your computer consisting of the libraries of documents, pictures, storage devices and even network devices. It also features the new Quick access showing the frequently used folders.

D Contents Pane: It is the main area to the right of the Navigation Pane that displays the contents of the selected folder or storage location.

THE RIBBON

In Windows 10, the File Explorer incorporates the **Ribbon** similar to the one featured in the Microsoft Office applications. The Ribbon contains buttons and commands for the most common tasks.

The File Explorer Ribbon has the following four tabs, each with different commands:

A File tab: It actually opens the File menu that has options like managing the File Explorer window or customize the File Explorer.

B Home tab: It has most of the tools to organize files and folders.

C Share tab: It has the options like Share, Email, Print, or Compress a file or folder.

D View tab: It has the options to configure the layout of the File Explorer window.

Session 6
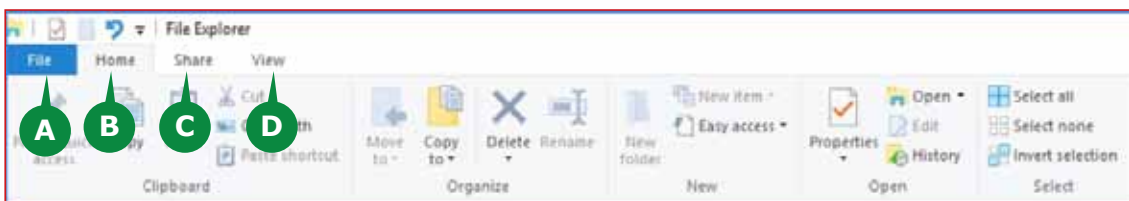
NAVIGATION AND SEARCH BAR

The Navigation and Search bar below the Ribbon helps you in navigating through your folder and searching for files. It has four sections as follows:
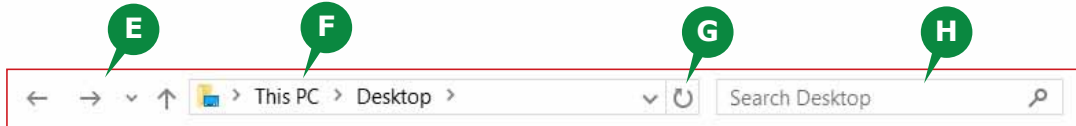
E Navigation buttons: The Back, Forward and Up buttons on the left allows you to move through recently opened folder locations easily.

F Address bar: To the right of the navigation buttons, the long Address bar displays an icon and the full path to the current folder.

G Refresh button: On the Address bar, the Refresh button refreshes the display of the contents pane.

H Search box: In the right side, the Search box gives access to the file or folder search feature of Windows 10. Entering a term in the Search box adds a new Search tab in the File Explorer ribbon with various search tools.

NAVIGATION PANE

The vertical pane that opens by default on the left side of the File Explorer window, displays a hierarchical view of the physical and virtual storage structures available in the computer. The Navigation pane allows you to browse folders and files on your computer or on a network. The Navigation pane displays the following nodes:

A Quick Access: The Quick Access node contains links to folders and libraries that you access frequently. You can also pin any folder location here to access it quickly.

B This PC: This PC node contains links to your user account-specific folders, and to the physical storage locations that are installed in or connected to your computer.

C Network: The Network node displays a representation of other computers on your local area network.

TIP
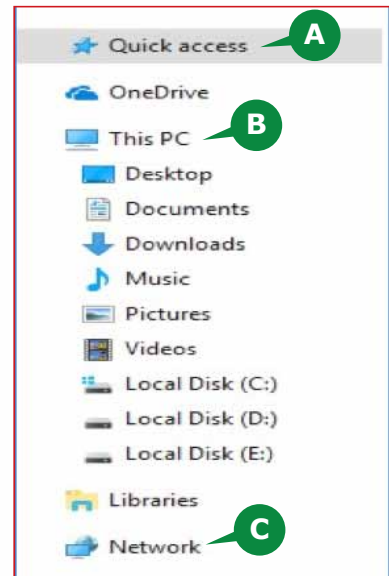
When you click on This PC node, Network node, or Homegroup node from the Navigation Pane, The Home tab and Share tab are replaced with the tab of the respective node.

CONTENT PANE

In File Explorer, the **Content Pane** displays files and folders stored in the currently selected folder or storage device. It displays the contents of the selected folder as a textual or iconic list. The Content Pane in the initial File Explorer interface has the following two sections, for easy access to recently opened files or folders.
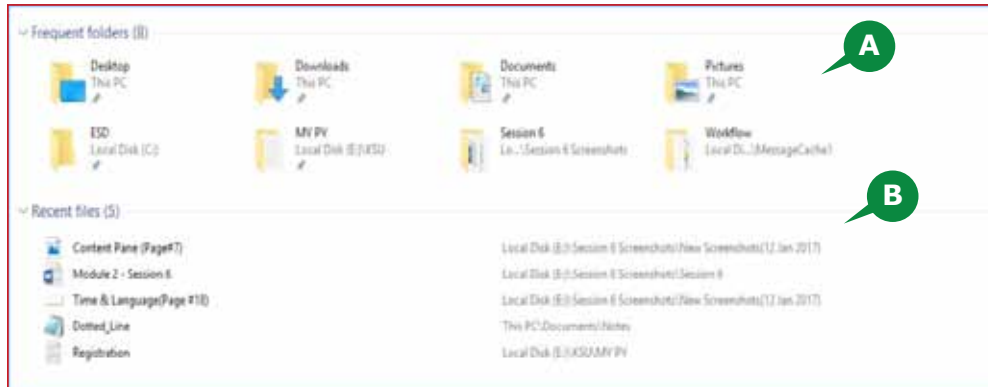
A Frequent folders section: It lists the folders you've worked with recently, for quick access to them.

B Recent files section: It lists files and documents that you've opened recently.

TIP

When you click on the Quick Access node in the Navigation pane, the **Frequent folders** *section and the* **Recent files** *section appear in the content pane.*

THE HOME TAB

Most of the tools you need to organize files & folders on your computer are provided in the Home tab of the File Explorer.

The Home tab consists of the following five groups:

A Clipboard: This group consists of commands to copy or move a file/ folder.

B Organize: This group consists of commands to copy, move, rename, or delete a file/ folder.

C New: This group consists of commands to create a file/ folder or other items.

D Open: This group consists of commands to open a file/ folder or display its Properties.

E Select: This group consists of commands to select the files/ folders in the content pane.

Session 6

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PIN TO QUICK ACCESS BUTTON

As discussed earlier, the **Quick Access node** in the Navigation pane gives you a quick way to open frequently used folders. You can use the **Pin to Quick Access button** on the Home tab to easily pin any folders location to the Quick Access list.

To pin a drive, folder, library, or other location to the Quick Access list, follow the steps given below:

1 In the File Explorer, select the folder that you want to pin to Quick Access.

2 Click the Home tab on the Ribbon.

3 In the Clipboard section, click the Pin to Quick Access button.

A The selected folder is now listed in Quick Access.
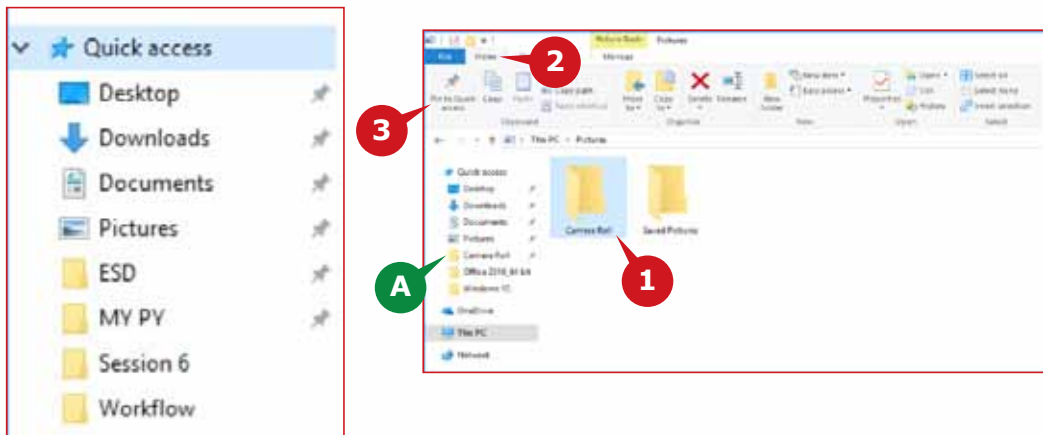
Unpin from Quick access

To remove a pinned location from Quick Access list, follow the steps given below:

1 Right-click on it in the Quick Access list.

2 Choose Unpin from Quick Access.
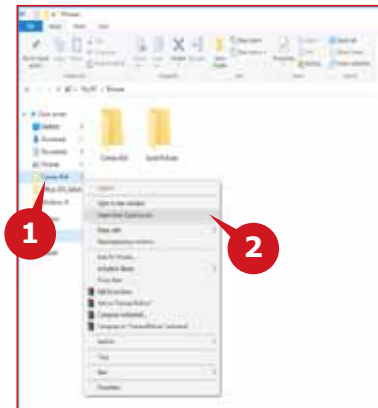
CLIPBOARD GROUP

When you **cut** or **copy** a folder or file, the item is moved to a storage area called the **Clipboard**. This facilitates you to paste one or more copies of it elsewhere. In addition to copying files and folders to other locations, you can also make copies of files in the original folder.
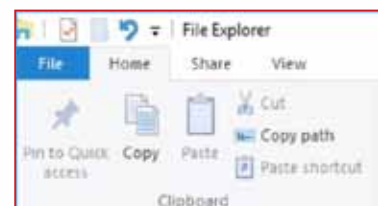
Copy, Paste and Cut

You can copy or move a file from one folder to another. In a similar way, you can also copy or move a complete folder.

To copy (or move) a file or folder to a different folder, follow the steps given below:

1 Select your file or folder in the *File Explorer*.

2 Click on the Home tab.

3 Click on Copy (or Cut) button in the Clipboard group; depending on whether you want to make a copy of the selected item or move it.

4 Open the destination folder.

5 Click on Paste button from the Clipboard group.

TIPS

To Copy, press: **CTRL + C**
To Cut, press: **CTRL + X**
To Paste, press: **CTRL + V**

Session 6
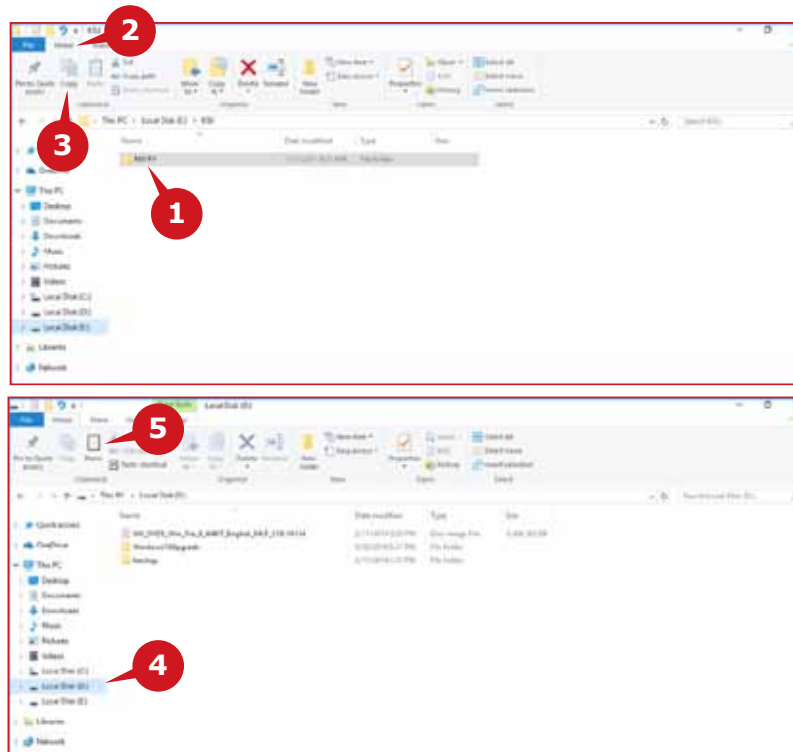
ORGANIZE GROUP

The **organize group** facilitates you to perform different operations such as **Copy, Move, Rename** and **Delete** in an efficient way.
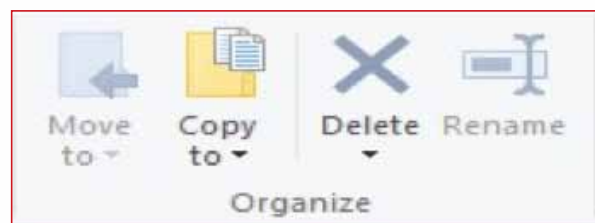
Move to and Copy to buttons

This option facilitates you to directly Move/Copy your file/folder to a recently opened folder or any folder without opening it.

To copy (or move) a file or folder to a different folder, follow the steps given below:

1 In File Explorer, select your file or folder.

2 Click the Ribbon's Home tab at the top.

3 From the Organize group, click the Copy to (or Move to) button.

4 A menu drops down, listing some common locations.

5 Click Choose Location.

6 Search through the drive and folders in the dialog box that opens to reach the destination folder and select it.

7 Click on Copy/Move button on the dialog box.
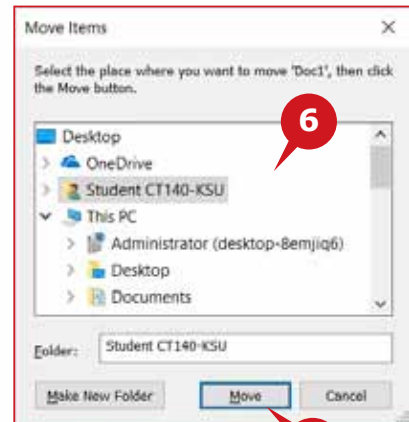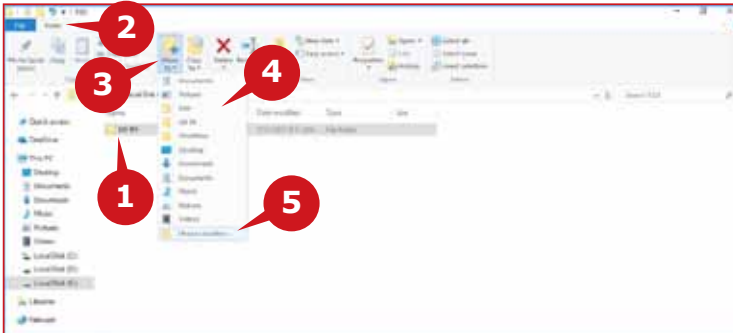
Delete button

You can Recycle or Permanently delete files or folders that you don't need any more.

To delete a file or folder, follow the steps given below:

1 In File Explorer, select your file or folder.

2 Click the Ribbon's Home tab at the top.

3 From the Organize group, click on the Delete button.

4 Click on the drop down arrow of the Delete button to Choose whether you want to Recycle it (send it to the Recycle bin) or permanently delete it.
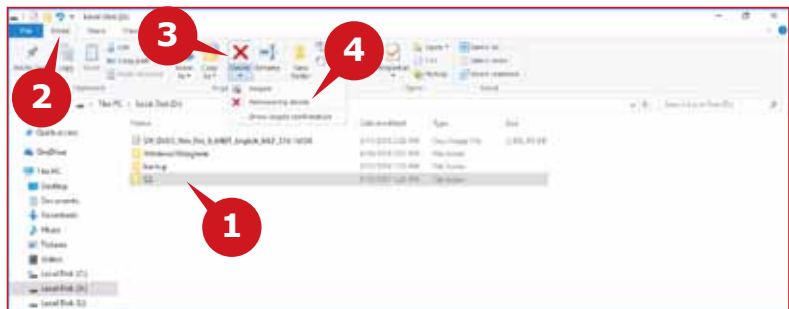
TIP

If you want to delete multiple items at once, select them and press **DELETE** *key on your keyboard.*

Restore from Recycle Bin

Normally, when you delete a file or folder, Windows 10 moves the object to the Recycle Bin.

To restore a file or folder from the Recycle Bin, follow the steps given below:

1 Open the Recycle Bin by double-clicking the Recycle Bin icon on the desktop.

2 Select the file or folder in the Recycle Bin window.

3 On the Manage tab, select Restore the Selected Items.
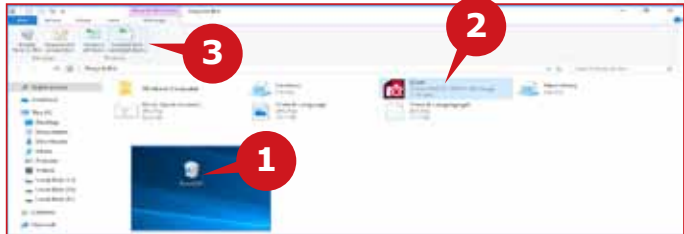
The selected file or folder returns to the folder it was in before it was deleted.

Rename

You can change the name of any file or folder based on changes in its contents at any time you want.

To rename a file or folder, select it in the File Explorer and follow the steps given below:

1 On the Home tab, in the Organize group, click the Rename button. In the content area, the current name of the file or folder becomes editable.

2 Type the new name and press the Enter key.
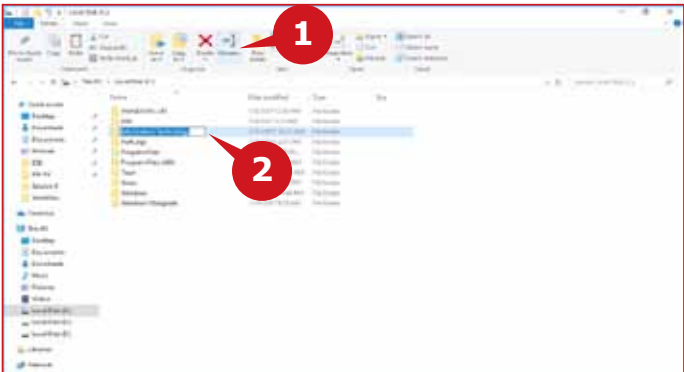
TIP

To Rename, press: **F2**

NEW GROUP

The **New group** facilitates you to create new **Folders or Files** as per your requirement.
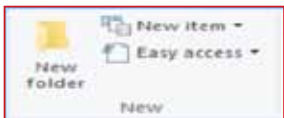
Creating a New Folder

To create a new folder, follow the steps given below:

1 Click on the Home tab in File Explorer.

2 Click on the New Folder button in the New group. This creates a New folder in the content pane.

3 Type the name for the newly created Folder and press ENTER
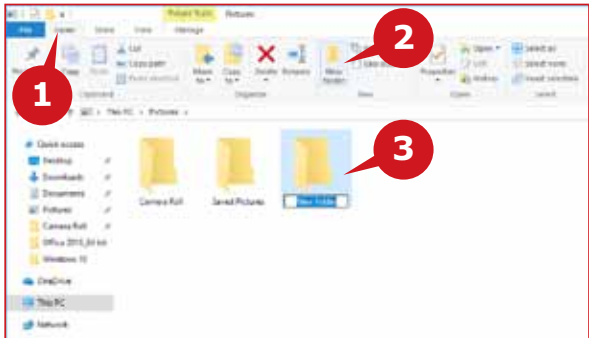
Creating a New Item

You can also create blank files of different types in File Explorer, which can be opened and edited in the respective application.

To create a new Item, follow the steps given below:

1 Click on the Home tab in File Explorer.

2 Click the drop down arrow next to the New item button in the New group. The list of file types appears.

3 Choose the type of file you want to create. This creates a New Item in the content pane.

4 Type the name for the newly created file and press the ENTER key.
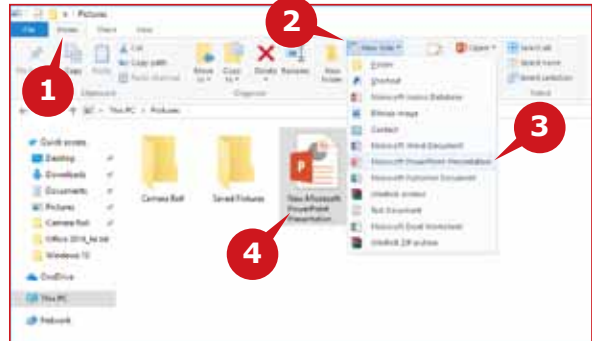
SELECT GROUP

The **Select group** facilitates you to select multiple files or folders from the content pane.

To select a **single file** or **folder**, you can simply click on it.
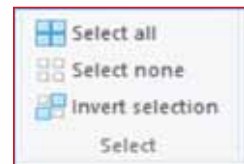
Select All

To Select all the items in a folder, follow the steps given below:

1 Click on the Home tab in *File Explorer.*

2 Click Select all option from the Select group.

TIP

*Press **CTRL+A** on your keyboard to select all the files and folders.*

Selecting Multiple Files

To select multiple **consecutive items**, follow the steps given below:

1 Click on the first item and Press **and** hold the SHIFT key on the keyboard.

2 Click on the last item you want in the selection. Release the SHIFT key.

To select multiple non-consecutive items, follow the steps given below:

3 Click on the first item. Press and hold the CTRL key on the keyboard.

4 Click on other items you want to select. Release the CTRL key after you finish your selection.
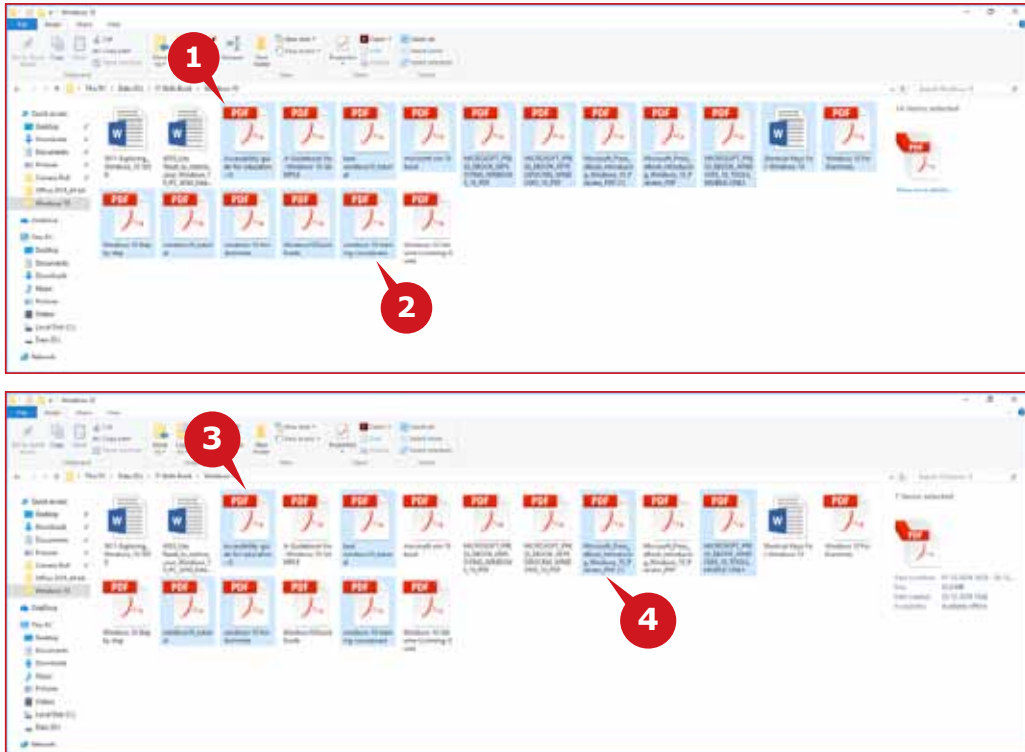
THE VIEW TAB

The **View** tab hosts the commands that you can use to customize the display of items in the File Explorer window.

The View tab allows you to change the way Windows displays your files and folders. It consists of the following four groups:

A The Panes group facilitates you to Show/Hide the Navigation Pane. It also lets you choose between the Preview Pane and the Details Pane.

B The Layout enables you to choose among the different icon sizes and their Details.

C The Current view group lets you arrange the icons in different orders.

D The Show/Hide group enables you show or hide different options related to files and folders.
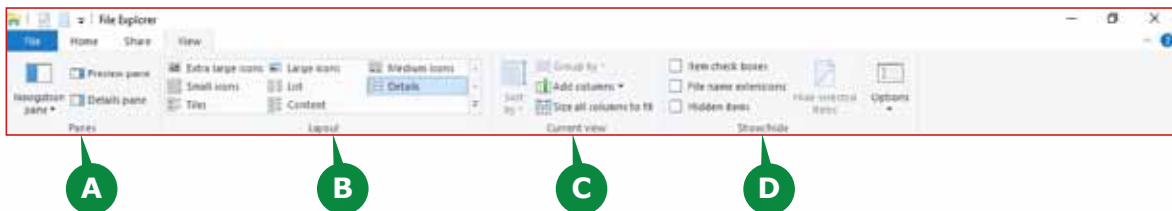
PANES GROUP

The **Panes group** facilitates you to apply different options to the Navigation Pane available on the left of the File Explorer. It further facilitates you to access Details or Preview panes.
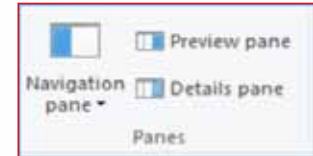
Show/Hide Navigation Pane

To Show/Hide the Navigation Pane, follow the steps given below:

1 Click on the View tab in File Explorer.

2 Click on the Navigation Pane button in the Panes group.

3 Check/Uncheck the Navigation pane option to show or hide it.

Preview and Details panes

You can either display the Preview pane or the Details pane on the right side of the File Explorer at a time. Click on the one you want in the **Panes** group.

A When the Preview pane is active, clicking on a file displays its content in the pane on the right side.

B If the Details pane is active, clicking on a file displays its detailed information in the pane on the right side.
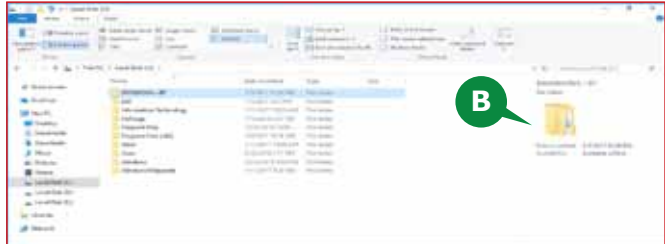
LAYOUT GROUP

For each folder in Windows 10, you can set a custom layout, i.e. change how the contents of a folder are displayed.

The options in the Layout group allows you to choose whether the contents of a folder are displayed as icons of various sizes such as **Extra-Large**, **Large**, **Medium**, **Small icons** or as a **List**, **Details**, **Tiles** or **Content** view.

To change the folder layout, follow the steps given below:

1 Click on the View tab in File Explorer.

2 Select the desired View option from the Layout group.
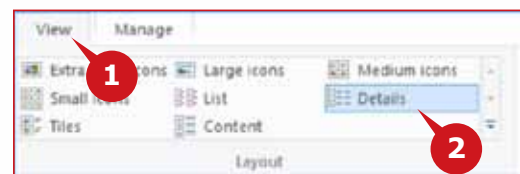
WORKING WITH LIBRARIES

By default, the Libraries are hidden in Windows File Explorer. If you want to show the Libraries node in the navigation pane, follow the steps given below:

1 Click on the View tab in File Explorer.

2 Click on the Navigation Pane button in the panes group.

3 Click on Show Libraries to make them visible.
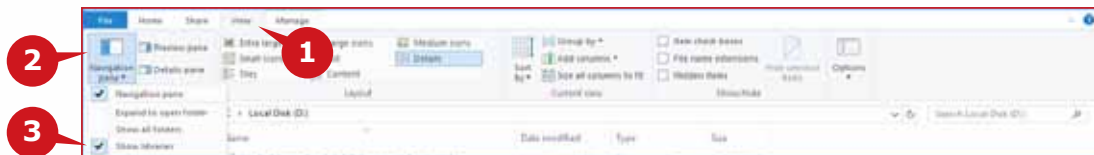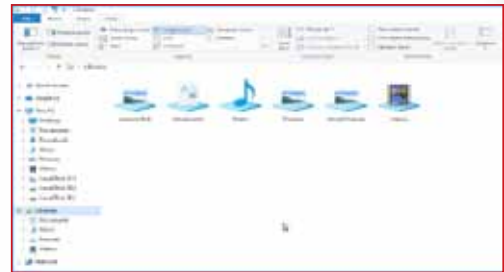
Creating a New Library

To create your own custom library, follow the steps given below:

1 Click on the Libraries node in the Navigation pane.

2 Right click in the Contents pane.

3 Point to the New option.

4 Choose Library. Type the name for the new Library created in the Content pane.
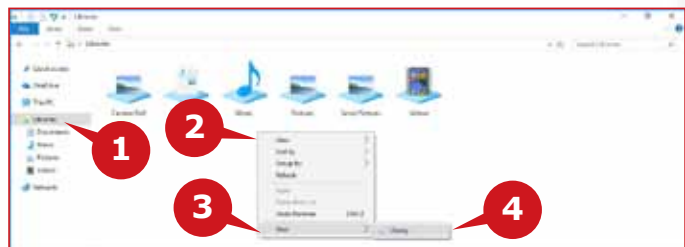
You can open the newly created library and click on Include a Folderbutton to browse for and add the first folder to the library.

Adding Folders to a Library

To add a folder to an existing library, follow the steps given below:

1 Click on the Libraries node in the Navigation pane, to open Libraries.

2 Click on Manage Library button from Manage Contextual tab.

3 Click the Add button.

4 Browse and select the folder that you want to include in the library.

5 Click the Include Folder button.

MANAGING COMPUTER SETTINGS

In Session 5, you have gone through various personalization settings of Windows 10. Noticeably, the computer settings have migrated from the more complex Control Panel to the seemingly simple Windows Settings App. The Settings app organizes computer settings into function specific pages or categories. Here, we guide you through the settings under the **Time & Language** category of Windows settings.

TIME & LANGUAGE SETTINGS

Time and Language option in the Windows Settings app allows you to set or change your System Date, Time, Region, Language and Speech settings.

To open Time & Language settings, follow the given step:

1 Open Windows Settings and Click on the Time & Language category.

The Time & Language settings page is displayed. It has three main settings options:

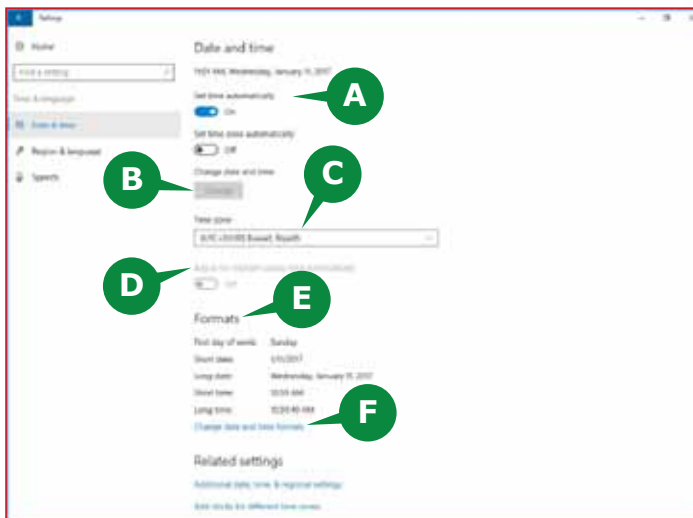**A** Date & Time

B Region & Language

C Speech
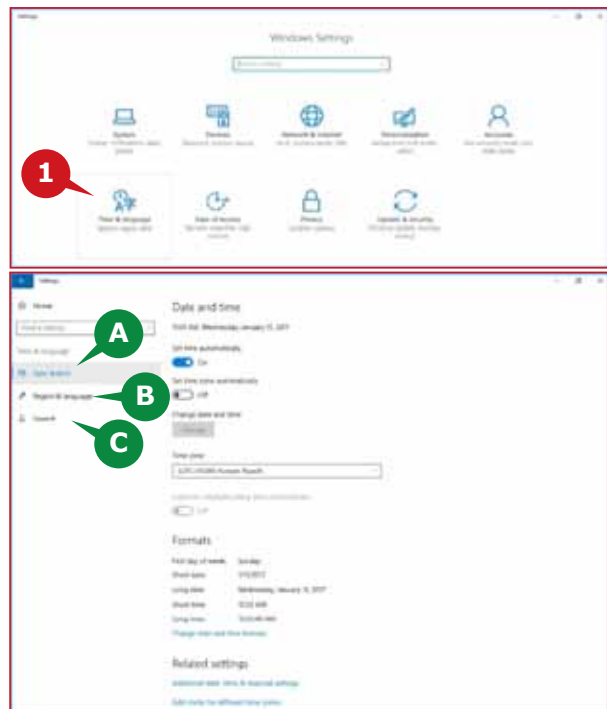
DATE AND TIME SETTINGS

The settings here are quite simple. You can set the time to adjust automatically or change it manually. You can also select your **Time Zone** according to the country you live in.

Date & Time lists the following preferences:

A Set time automatically. If set to ON, the system time will be synced from the Internet time servers.

B Change date and time. This will become active only if you disable the "Set time automatically" option.

Allows you to change date and time manually.

C Time Zone. Pick the correct time zone that matches your location.

D Adjust for daylight saving time automatically. Queries Internet servers to sync the correct daylight saving time.

E Formats. Displays the following formats: first day of the week, short date, long date, short time, long time.

F Change date and time formats. Allows you to adjust the formats displayed on the Date & Time page. Here you can switch between 12-hour and 24-hour formats for instance (the **tt** at the end indicates 12 hour formats).

To Change the date and time manually, follow the steps given below:

1 Select the Date & Time option from Time & Language settings.

2 Switch OFF the Set time automatically option.

3 Click the Change button.

4 In the Change date and time window, modify the date and time, and click on the Change button to bring the changes into effect.
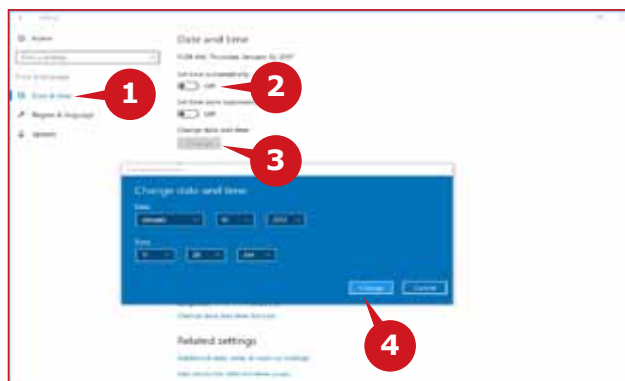
REGION & LANGUAGE

The **region & language** Settings enable you to change the country or region, and to add or remove languages from the system. Open the Start Menu and click on **Settings > Time and Language > Region and Language**.

Country or region

The first option on the right-hand pane will allow you to change the region. This is useful for finding localized content and apps. You can set it to any country you desire. Windows and apps may or may not use the selected region to deliver local content. The setting affects Windows Store among other things.

A Click on drop down list to choose your region.
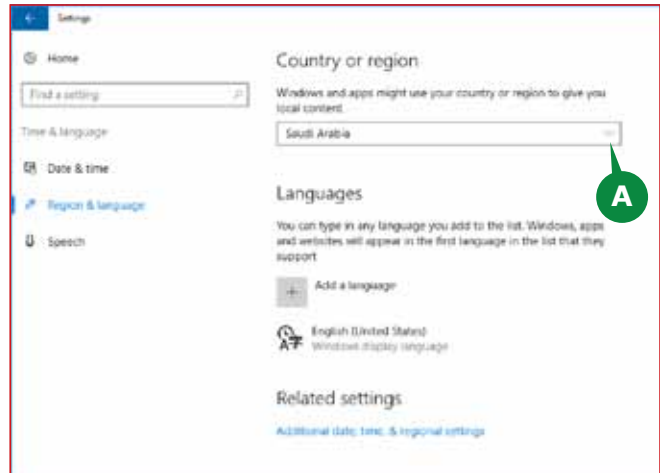
Languages

The **Languages** option allows you to install new languages. You may add new languages to the operating system depending on the version of Windows that is installed on the computer. Click on **Add a Language** and you'll be presented with a list of more than 140 languages to choose from. These languages may be set to the default system language.

TIP

The **Related Settings, Additional date, Time and regional settings** *take you to the Control Panel where you can change the language, region and date and time of your PC in the old classic way, you used to do in the previous versions of Windows.*

Add a Language

To add a new Language, follow the steps given below:

1 Open Windows Settings.

2 Click Time & language category.

3 Click Region & language.

4 Under Languages, click Add a language.

5 Choose the language you want to add, for example Arabic, and select the specific variation if applicable.
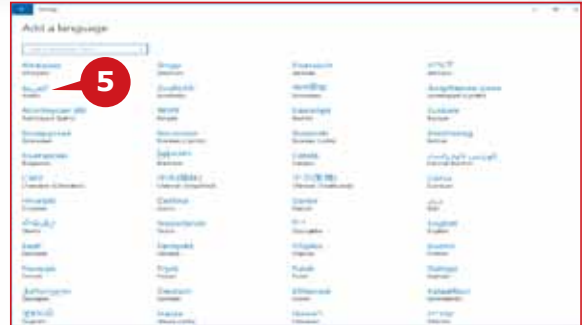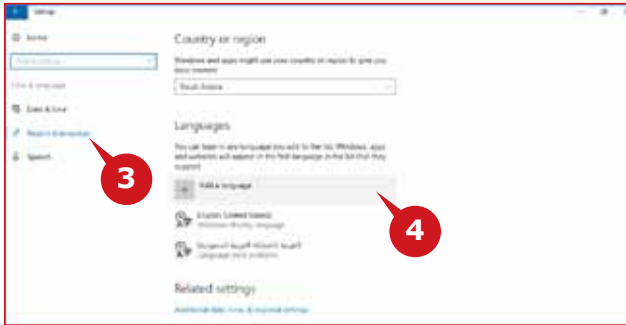
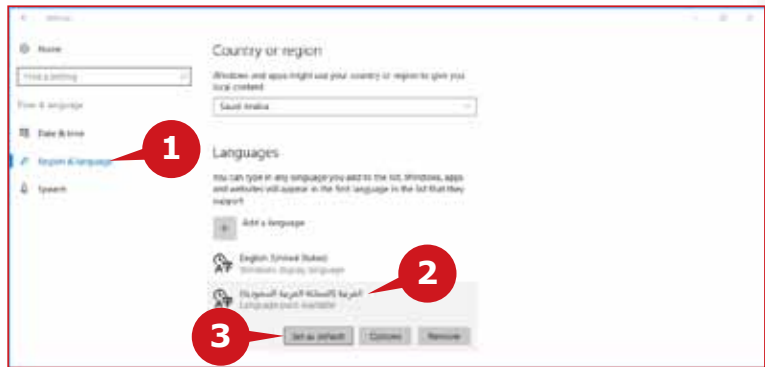**Changing Windows display language**

To change the Windows 10 display language, follow the steps given below:

1 Open the Region & Language settings pane

2 In the Languages area, click a language that is not labelled as Windows display language.
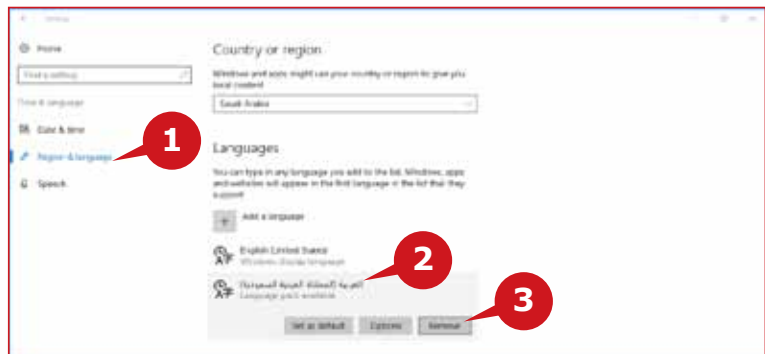
3 Click Set as default.

Sign out of Windows, and then sign back in to completely implement the display language change.

Remove a system language

To remove a system language, follow the steps given below:

1 Open the Region & Language settings pane.

2 In the Languages area, click the language you want to remove.

3 In the expanded pane, click Remove.

Session 6

SYSTEM INFORMATION

It is important to know the configuration (technical information) of your computer system, such as edition or version of Windows, Processor details, Amount of RAM, etc. Windows 10 provides System Information in a modern way.

To display the System Information, open **Windows Settings** App and follow the steps given below:

1 Choose the System category in the Settings window,

A The System settings window appears.

2 Scroll down the menu on the left and click on About option.

B The System Information appears on the right side.

Windows 10 System Information has the following:

C PC Name: Gives the name of the computer, chosen while installing Windows.

The Name identifies a computer on a network. It may be different than the user name of the user account.

D Edition: Displays the edition of the Windows installed.

E Version: Displays the Version number of the Windows edition.

F Product ID: Displays the activation status of Windows. Shows the Product ID if Windows is already activated.

G Processor: Displays the type and speed of the installed Processor.

H Installed RAM: Displays the amount of RAM installed.
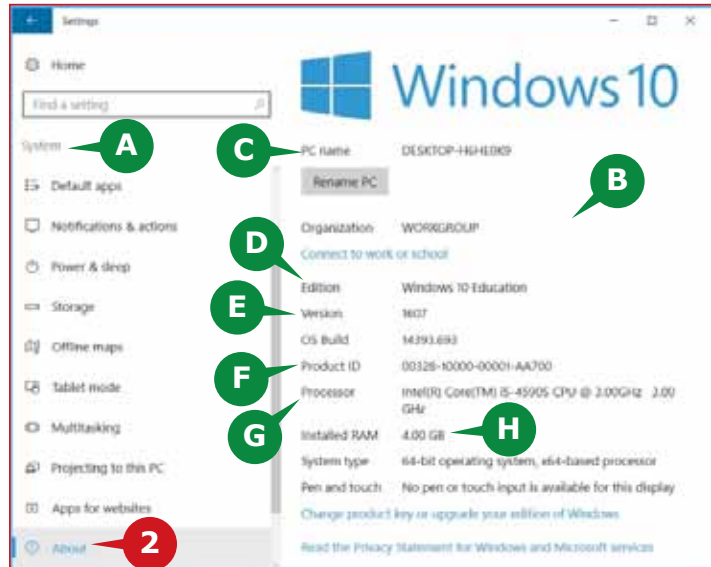
TASK MANAGER

You learnt about the Task View to view and switch among the running apps. If you want to know the resource consumption by each running app, you can use the Task Manager tool of Windows 10.
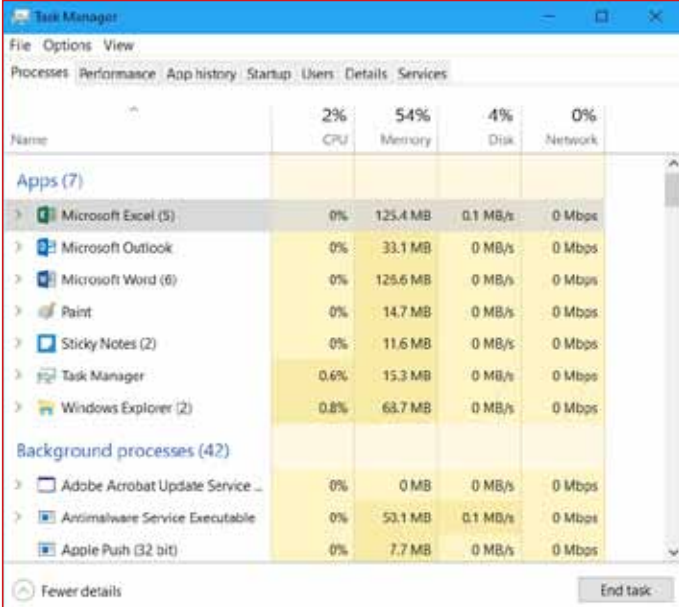
The Task Manager displays the status of all the running apps along with the background processes.

It also displays the amount of system resources utilized by the app, such as Memory, CPU, and Disk.

To start the Task Manager, Right click on empty area of the Taskbar and choose Task Manager.

You can close any **Not Responding** app from the Task Manager by clicking on the **End task** button at the bottom right corner.

You can also monitor the real time performance of CPU, Memory, Disk, and Network by clicking on the Performance Tab at the top.

Session 6

ACTIVITIES

Activity 1

Choose the correct option for the following statements.

1. _____ is the file management application of Windows 10 to access, edit and manage files/ folders.

   a. File Explorer

   b. Control Panel

   c. My Computer

   d. My Documents

2. When you cut or copy a file/ folder, it is stored temporarily in the_____.

   a. File

   b. Clipboard

   c. Icon

   d. Recycle bin

3. We can restore the deleted files/ folders from the _____.

   a. Recycle bin

   b. My document

   c. File Explorer

   d. All of the above

4. The keyboard shortcut to activate the Search bar of File Explorer_____.

   a. Ctrl + S

   b. Window key + E

   c. Ctrl + E

   d. Ctrl + N

Activity 2

Fill in the blanks with the appropriate words provided in the box.

Quick Access	Navigation Pane	Contents Pane	System Information	Folder

1. A_____ is a container in which files, folders and apps are stored.

2. A_____ appears by default on the left side of the File Explorer window and allows you to browse for the folders and files on your computer.

3. The_____ node in the Navigation pane give you a quick way to open frequently used folders.

4. We can use _____to view the complete system specifications like Windows edition, memory configuration, computer name, etc.

Activity 3

Practice the following tasks on your computer.

1. Open the File Explorer and Create a new folder named "Sample" inside the "Documents" folder. (Hint: Use the "New folder" button in the File Explorer window.)

2. Pin the "Sample" folder to the Quick access button. (**Hint:** This folder is located within the "Documents" folder)

3. Rename the "Sample" folder as "My Files". (**Hint:** "Sample" folder is available in the "Documents" folder)

4. Create a new item "Microsoft word document" inside the "Documents" folder. (**Hint:** Use the "New item" button in the File Explorer window.)
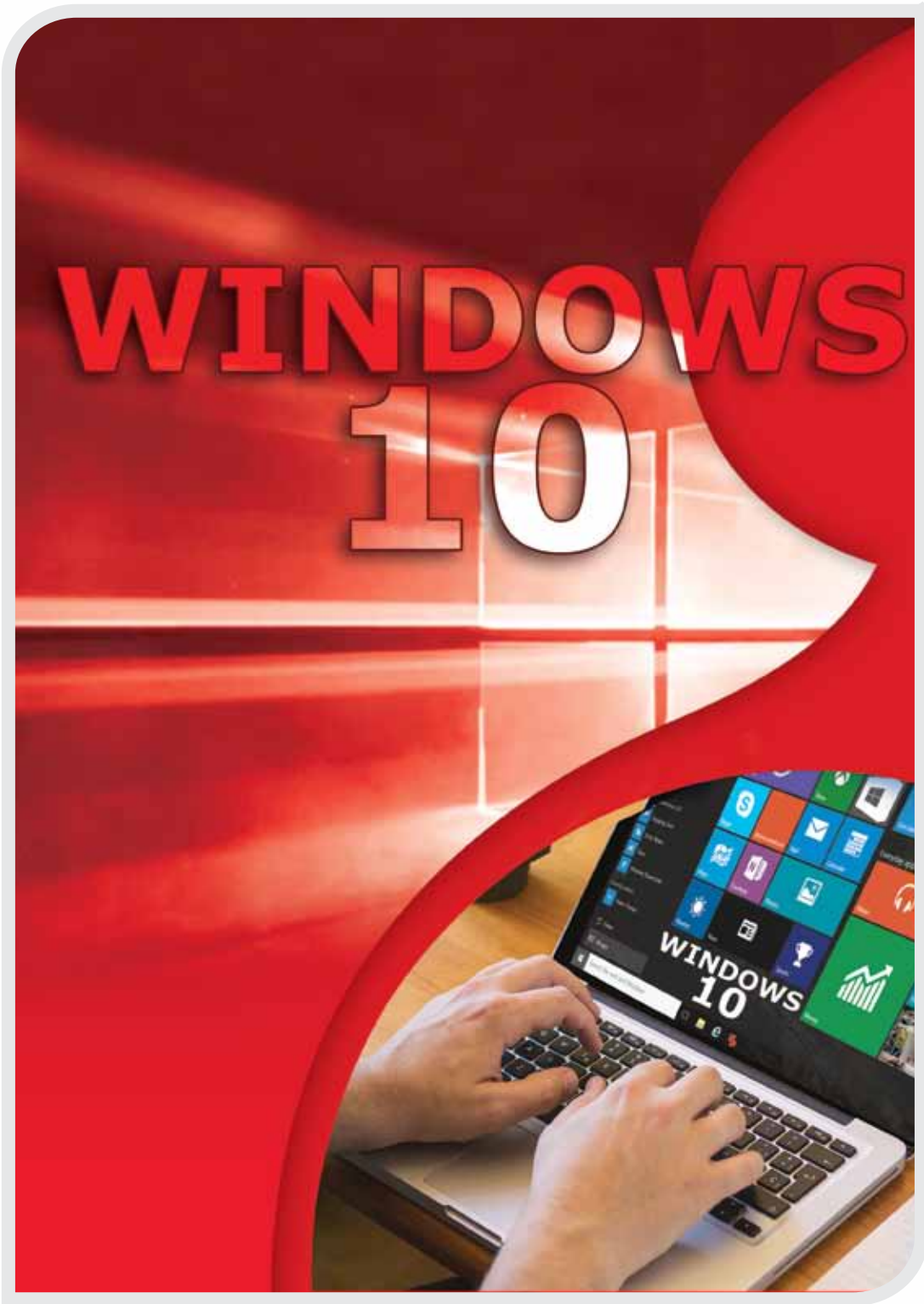
Module Three

Word Processing (Word 2016)

Session 7

Overview of Application Software, Word Processing, Getting Started with Word 2016 & The File Tab

OBJECTIVES

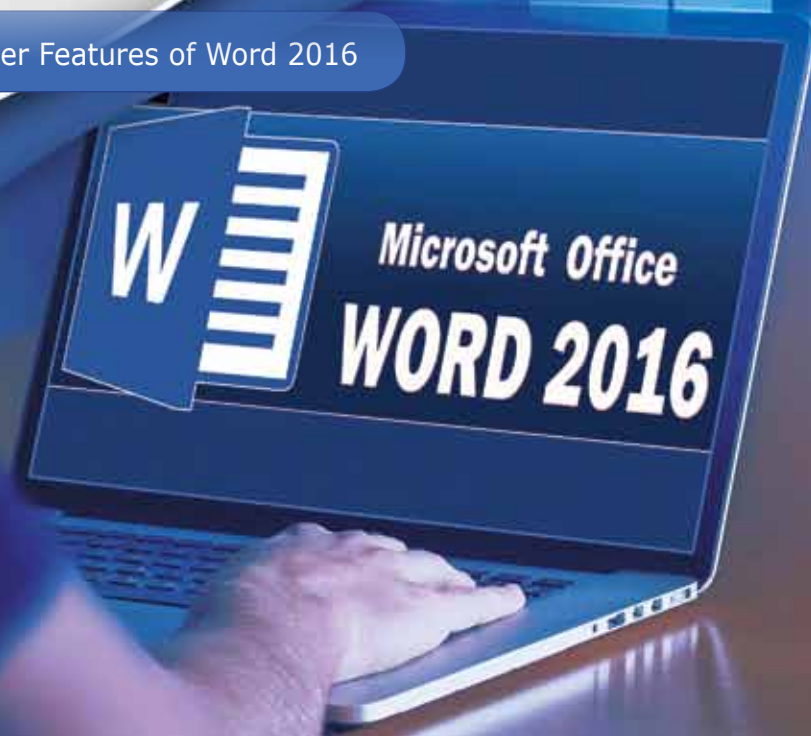### General Objectives

In this Session, you will learn about **Overview of Word Processing, Getting Started with Word 2016** & **The File Tab.**

Specific Objectives

At the end of this Session, you should be able to understand and Practice:

- **Overview of Application Software**
    - Application Software
    - Software Suites

- **Overview of Word Processing**
    - Word Processor

- **Getting Started with Word 2016**
    - Starting Word 2016
    - User Interface of Word 2016
    - New Features of Word 2016
    - Creating a simple document
    - Navigating through a document

- **The File Tab**
    - Managing Documents

LEARNING

OVERVIEW OF APPLICATION SOFTWARE

In the previous module, you have learnt about Windows 10, which is a System Software. There is another type of software called Application Software. The following section provides you an outline of it.

APPLICATION SOFTWARE

Application software is a program, or group of programs, designed for **end users** to perform specific tasks. Examples include applications such as database programs, word processors and spreadsheets.

Application Software can further be classified as **General Purpose** Applications and **Special Purpose** Applications. The General Purpose applications, such as Word, Excel, PowerPoint, Microsoft Edge, etc. are useful to almost all computer users. Special Purpose applications are customized software used for specific purpose, such as Hospital Management System, Air Traffic Control System, etc.

TIP

Application software may simply be referred to as an application.

SOFTWARE SUITES

A software suite is a collection of two or more software programs that are bundled and sold together. Each component program generally provides different but related functionality. A good example of a software suite is Microsoft Office, which has multiple software programs like Word (Word Processor), Excel (Spreadsheet), PowerPoint (Presentation Program), and Outlook (E-mail client). Other examples include Adobe Graphics suite, Corel Graphics suite, etc.

MS OFFICE 2016

MS Office 2016 is the latest release of the Microsoft Office suite. It is a complete package or suite from Microsoft Corporation, which consists of applications such as Word 2016, Excel 2016, PowerPoint 2016, Access 2016, Publisher 2016, and Outlook 2016, etc. It is the most widely used productivity suite having the general purpose applications useful for the corporate office environment or to a home user.

OVERVIEW OF WORD PROCESSING

Word processing is the phrase used to describe "using a computer to create, edit, and print documents". Of all computer applications, word processing is the most common. To perform word processing, you need a computer, a special program called a *word processor,* and a printer. The major advantage of Word Processing is that you can make changes without retyping the entire document.

WORD PROCESSOR

The application used for Word Processing is commonly known as a Word Processor. A word processor enables you to create a document, store it electronically on a disk, display it on a screen, modify it by entering commands and characters from the keyboard, and print it on a printer. These documents can be closed and opened again to continue working on them.

A word processor provides the following common features:

- Spell Checker
- Find & Replace
- Formatting
- Word wrap
- Headers & Footers

POPULAR WORD PROCESSORS

There is a variety of Word Processors available in the market from different vendors. The Following are some of the popular Word Processors.

- Microsoft's Word 2016
- Apple's Pages
- Corel's WordPerfect

GETTING STARTED WITH WORD 2016

Word 2016 is the most widely used word processor designed by Microsoft. It is a part of the Microsoft Office suite, but can also be purchased as a stand-alone product. It is available for Windows and Macintosh operating systems.

Word 2016 allows you to create various types of professional documents such as Letters, Flyers, Brochures, Manuals, CVs and more.

STARTING WORD 2016

You know that Word 2016 is a word processor. To create a document in Word 2016, you need to start the application.

To start MS Word 2016 in Windows 10, follow the steps given below:

1 Click on Start Button to open the Start menu.

2 Click on Word 2016 from the All Apps list.

The Start Screen of Word 2016 appears with different options to open a file. You can either choose an existing file or start with a new one. Pressing the Esc key will start with a new blank document.

USER INTERFACE OF WORD 2016

The Microsoft Office 2016 user interface is quite uniform across its components. Word 2016 offers a more refined user interface along with many interesting tools.

The user interface of Word 2016 consists of the following:

A Quick Access Toolbar: It provides the easy access to the commands that you use frequently. By default, it has the *Save, Undo & Repeat* commands. You can add or remove commands to Quick Access Toolbar by simply clicking on the Customize arrow button on its right.

B Ribbon: Almost all the commands in Word 2016 are compiled together in the form of a Ribbon, in order to help you work efficiently.

C Tabs: At the top of the Ribbon is a set of tabs. Clicking a tab displays an associated set of commands.

D Groups: Related commands of a Ribbon Tab are organized in Groups.
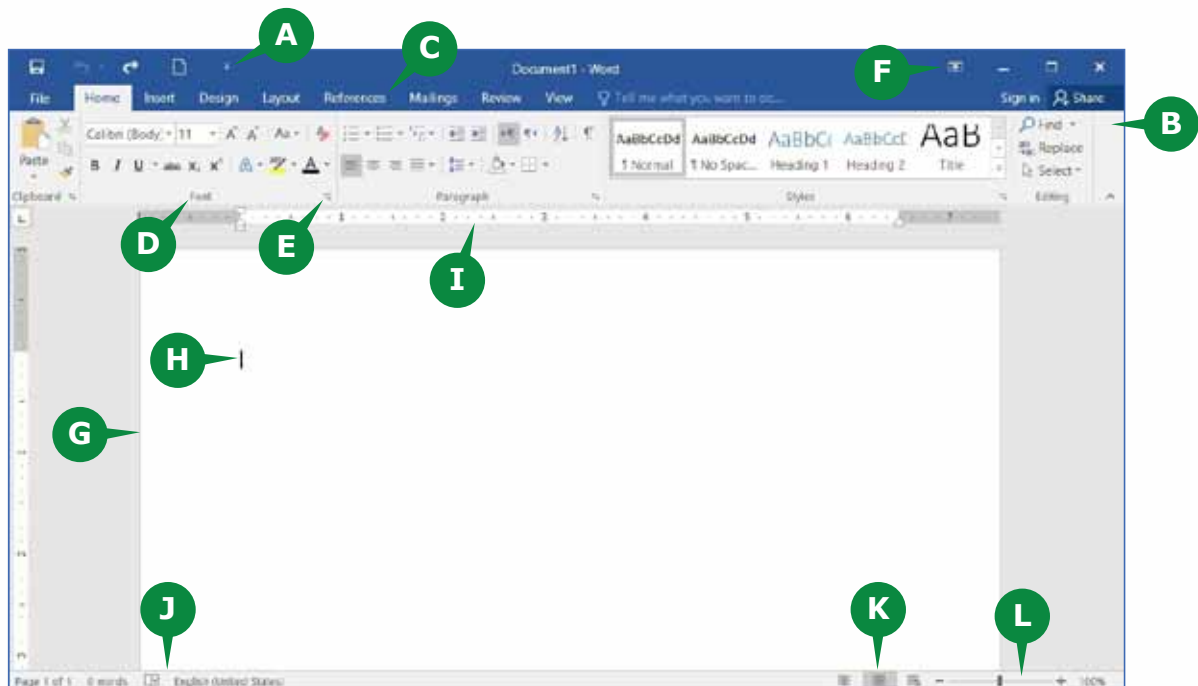
E **Dialog Box Launcher:** Clicking the Dialog box launcher displays the associated dialog box or pane.

F **Ribbon Display Options:** It allows you to *Show or hide* the Ribbon. Click on it to choose from the menu options *Auto-hide ribbon, Show Tabs, or Show Tabs and Commands.*

G **Work Area:** The white area in the middle of the Word 2016 user interface is the Work Area or Workspace. This represents the actual page where you type text, edit or format a document.

H **The Insertion Point (Cursor):** The Insertion Point or Cursor is the blinking vertical line in the Work Area. It indicates the current active place in the document where you can insert text, images, apply editing or formatting commands.

I **Rulers:** It helps you to view and adjust the position of the contents in the document.

J **The Status Bar:** It displays the information about the current document such as the *total number of pages, the current page number, total number of words in the document, current proofing language and proofing status.*

K **View Buttons:** Three view buttons *Read Mode, Print Layout, and Web layout* on the right side of the Status bar allows you to easily switch between the document views.

L **Zoom Slider and Buttons:** These allow you to easily adjust the zoom level of the document contents as per your convenience.

TIP

When you move your mouse over most commands, a **Tooltip** *is displayed. This provides a brief description about that command. Equivalent keyboard shortcuts are also displayed, if applicable.*

ADDING COMMANDS TO QUICK ACCESS TOOLBAR

The Quick Access Toolbar allows you to add frequently used commands so that they are readily available.

To add commands to Quick Access Toolbar, follow steps given below:

1 Click on the Customize Quick Access Toolbar arrow.

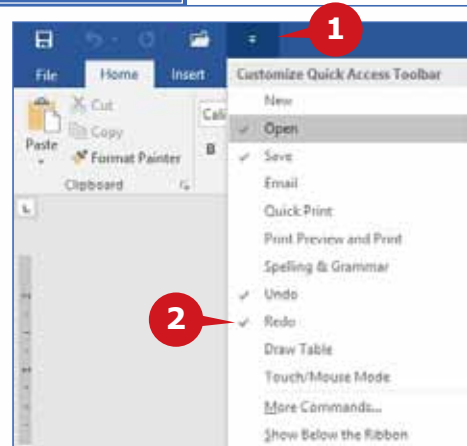**2** Choose the desired command from the displayed list.

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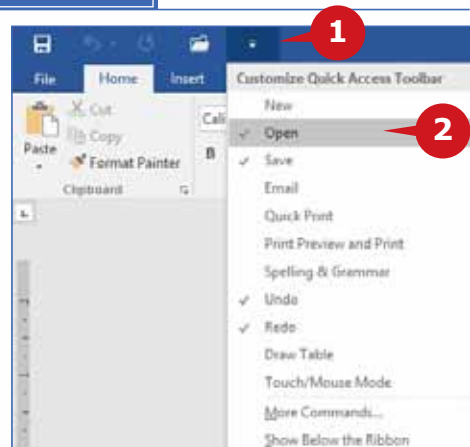
REMOVING COMMANDS FROM QUICK ACCESS TOOLBAR

To remove a command from the Quick Access Toolbar, follow the steps given below:

1. Click on the Customize Quick Access Toolbar arrow.
2. Uncheck the desired command from the displayed list.

RIBBON DISPLAY OPTIONS

You can control the display of the ribbon by clicking the commands on the **Ribbon Display Options** menu. It is located on the right side of the title bar, near the minimize button. It provides you with three options:

A. Auto-hide Ribbon: This option hides the ribbon and maximizes the workspace. You need to click the top of the screen to view the ribbon.

B. Show Tabs: This option show Ribbon tabs only. You need to click on the tab to reveal the ribbon's commands for that tab.

C. Show Tabs and Commands: This option always show Ribbon tabs and commands.
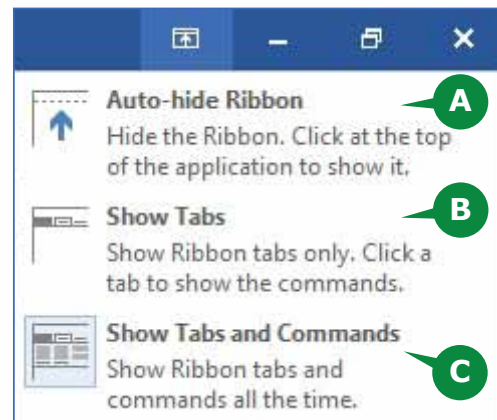
USING ACCESS KEYS

Access keys are a set of keyboard shortcuts used to access the Tabs and Commands. You need to press the **Alt** key to activate the Access keys. This displays the little **labels**, or **badges** for all the tabs. After you press a key to activate a particular tab, the badges for the commands on that tab appear. Every single command on the Ribbon and the Quick Access Toolbar has an access key. Press the **Alt** key once again to hide the Access keys.

NEW FEATURES OF WORD 2016

Word 2016 is equipped with several new features to help you work more efficiently. Out of these, following are the two useful features.

TELL ME BOX

In Word 2016 user interface screen, you might have noticed a text box on the right of the ribbon tabs with a bulb sign that says "*Tell me what you want to do…*"

A It allows you to do the things quickly and efficiently, keeping you free from remembering and locating the commands in various tabs & ribbons.

1 All you have to do is to simply enter a word or a phrase in the Tell Me box about the command you want.

2 Word 2016 provides you a list of the related commands. You can choose the one you are looking for.

**3** You can even use the Tell Me box to get help on a particular command.
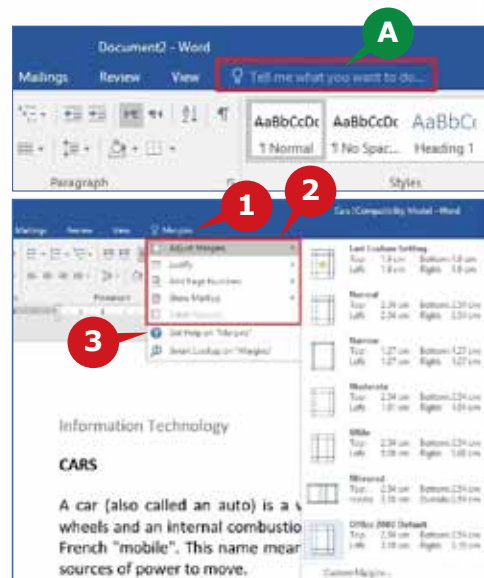
SMART LOOKUP

Another interesting feature in *Word 2016* is the *Smart Lookup*. It allows you to get the definitions, Wikipedia articles, and top related searches from the web about any word or phrase in your document. Thus, bringing the research directly in to *Word 2016.*

1 Select the word and right click on it.

2 Choose the Smart Lookup option.

A The Insights pane appears with the results from the online sources like Wikipedia, Bing, and Oxford Dictionaries.

Amazing thing of the *Smart Lookup* is that it gives you the *contextual results* that are relevant for the use of the selected word or phrase in the document. For example, if you use Smart Lookup selecting the word office in the phrases *Office Furniture* and *Microsoft Office* Apps, the results in the Insights pane will be different according to the phrase.

Session 7

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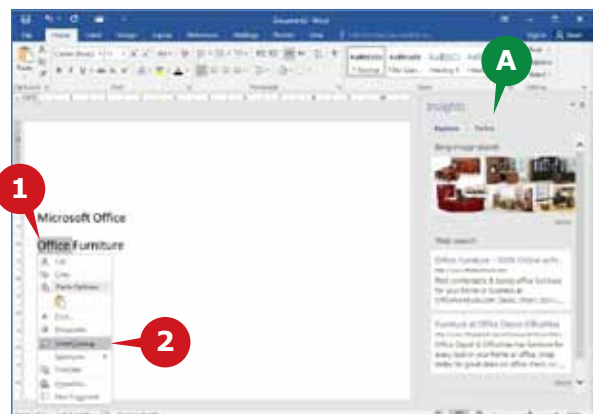
CREATING A SIMPLE DOCUMENT

By now, you have learnt about the interface of Word 2016. You have gone through the different features available in Word to ease your work. You can now create a simple document to have a practical hands-on experience. Acquiring the basic skills of entering text, selecting text and navigating around in the document will help you to work efficiently with Word 2016.
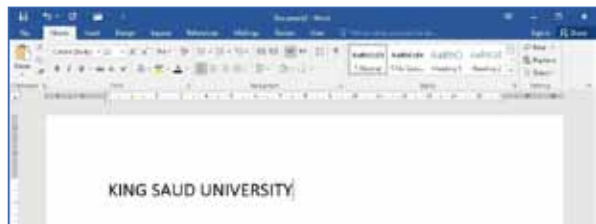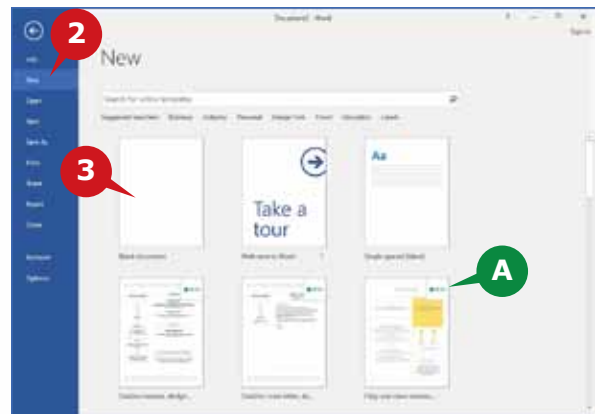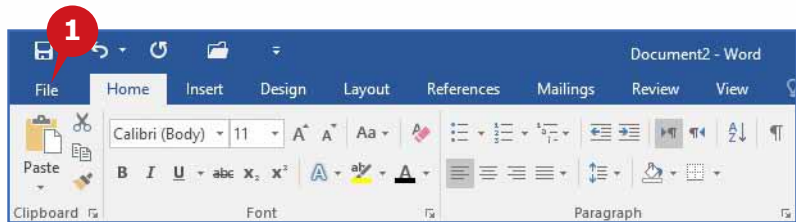
CREATE A NEW DOCUMENT

As already discussed, when you start Word 2016, you can choose to start with a new blank document. You can even create a New document from an already open Word document.

To create a New Blank document, follow the steps given below:

1 Click on the File tab.

2 Click on the New command.

3 Click on the Blank document.

A Templates: A Template is a pre-designed document that can be used to create similar new documents. All the formatting is complete; just add your own contents and your document is ready. A lot of templates to create brochures, invoices, letters, CVs, certificates, etc., are already pre-installed in Word 2016. Moreover, you can browse through thousands of online templates. You can also create a Template from your document in Word 2016.

ENTERING TEXT

Whenever a new document is created, the flashing cursor is always seen at the beginning of the first line. You can start entering text by pressing the keys on the keyboard. As you press any alphabet key on the keyboard, that alphabet is inserted before the cursor or the insertion point and the cursor moves one position ahead. You can continue typing to complete a word. Press the **Spacebar** key to leave a space between each word.

Word Wrap

Whenever you reach the end of line, the cursor jumps to the next line automatically. If the last word cannot fit on a line, it will also jump with the cursor to the next line. This feature is known as **Word Wrap.** This allows you to type in continuously without bothering about the end of lines.

Use of Enter Key

Press the **Enter** key when you want to end the current paragraph and start with a new one. In fact, whenever you press the Enter key in the document, Word treats it as a new paragraph. Thus, a paragraph in Word 2016 can be of multiple lines, a single line, or even a single word.

Use of Tab Key

The **Tab** key allows you to leave some blank space and enter the text away in a line instead of pressing the Space key multiple times. Pressing the Tab key jumps the cursor five spaces ahead, by default. You can also set the Tab stop positions as required. This is usually helpful in creating structured documents. Tab key is also helpful while working with Tables in Word.

SELECTING TEXT

To edit or format text, you need to select it first. You can select text by two ways, either by using **mouse** or **keyboard**.

To select using keyboard, press and hold the **Shift** key along with **Navigation Keys (⬅, ⬆, ➡, ⬇).**

To select using mouse, click and drag the mouse over the text you want to select.

TIPS

To select a **single word**, double *click on it.*
To select a **paragraph**, *position the mouse pointer in the paragraph and click 3 times.*
To select the **entire document**, *use the Keyboard Shortcut **CTRL + A.***
To **deselect** *text, click anywhere outside the selected area or use the Arrow keys.*

DELETING TEXT

In order to delete the characters in a document, you can use the **Delete** or the **Backspace** key. The **Delete** key is used to delete the english characters to the right of the cursor. The **Backspace** key is used to delete the english characters to the left of the cursor.

If you want to delete a section of text in the document, **select the text** and press the **Delete** or the **Backspace** key.

TIPS

To delete a whole word to the right of the cursor, use the Keyboard Shortcut **CTRL + Delete.**

To delete a whole word to the left of the cursor, use the Keyboard Shortcut **CTRL + Backspace.**

UNDO AND REDO OPTIONS

Sometimes after making some changes in a document, you may decide that they are not necessary. You can reverse your last action by using the Undo command.

To undo any action, follow the steps given below:

1 Click the Undo button on the Quick Access toolbar or use the keyboard shortcut CTRL + Z.

2 You can click on the arrow symbol to select and Undo multiple commands you performed recently or use the keyboard shortcut CTRL + Z repeatedly.
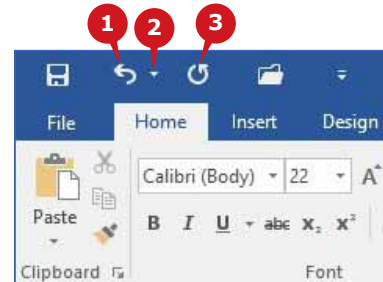
Redo command is used to perform the actions which has been undone by the Undo command.

To Redo an action, follow the step given below:

3 Click the Redo command on the *Quick Access Toolbar* or use the keyboard shortcut CTRL + Y.

The Redo command can also be used to Repeat your last action for another selection. To use the Redo command as Repeat, Select the text where you want to repeat your last command and Click the Redo/Repeat button on the Quick Access Toolbar or use the keyboard shortcut CTRL + Y.

NAVIGATING THROUGH A DOCUMENT

While working on a document, it is frequently required to locate and select a section of text from any part of the document. You can move across the whole document with keyboard or mouse.

NAVIGATING WITH KEYBOARD

Keyboard allows you to navigate through a document using the following key(s).

* To move through left, right, up or down directions, use the four **Arrow keys (⬅, ⬆, ➡, ⬇)** on the keyboard.
* To move through word by word in the left or right direction, use the **Control key (CTRL)** along with the **left or right arrow keys (⬅, ➡).**
* To move through by a paragraph in up or down direction, use the **Control key (CTRL)** along with the **up or down arrow keys (⬆, ⬇).**
* To jump directly to the beginning or the end of the current line, use **Home** or **End** key on the keyboard.
* To jump to the beginning or the end of the document, use the **Control Key (CTRL)** key along with the Home or End key.
* To move page by page in up or down directions, use the **Page Up** or **Page Down** key.

NAVIGATING WITH MOUSE AND SCROLL BARS

Moving to a part of the document can be sometimes quicker with mouse. You can simply use the mouse wheel or the scroll bars to locate the part of the document you want. Word 2016 provides you two types of scroll bars:

A Vertical scrollbar:
This allows you to navigate through the document in up-down directions.

B Horizontal scrollbar:
This allows you to navigate through the document in left-right directions.

y cars owned since 1998 by
Armistice with Germany on 18

USING THE NAVIGATION PANE

In Word 2016, Microsoft has improved the navigation experience with the *Navigation Pane.* The navigation pane allows you to move across a document by Heading levels, Pages or by Results of a text search. With the help of navigation Pane, you can search specific text and even browse the pages in the document.

To open the navigation pane, follow the steps given below:

1 Click on the View tab.

2 In the Show group, check the Navigation Pane box.

A The navigation pane opens at the left of your document window.
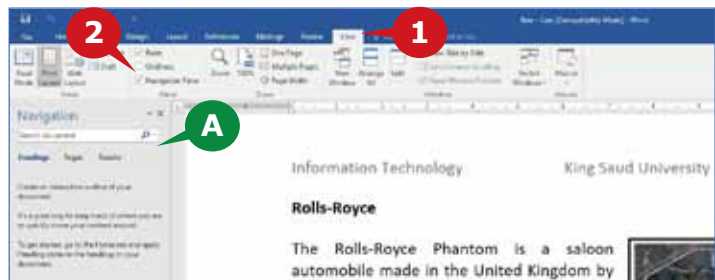
USING GO TO OPTION

Go To option takes you directly to the required page, section etc., by entering the desired page or section number. This option is available under **Find** menu of **Editing** group in the **Home** Tab.
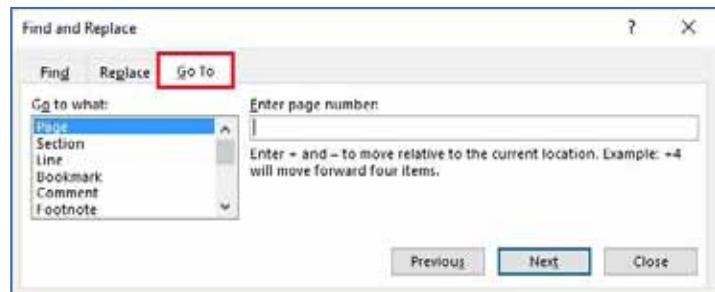
THE FILE TAB

The first tab in Word 2016 is the File Tab. When you click the File tab, the document window becomes invisible and a menu is displayed on the left with the options such as Save, Close, and Print a document. It also displays the information about the current document on the right side. The view of File tab is also called the **Backstage view**.

MANAGING DOCUMENTS

The File tab provides the options to manage the documents. You can Save, Open, Close, or Print your documents using the File Tab.

SAVING A DOCUMENT

Saving your work at regular intervals is very important. This will prevent data loss due to power failure or unforeseen circumstances. By default, a document in Word 2016 is saved with the file extension **.docx.**

To Save a document from the File Tab, follow the steps given below:

1 Click on the File tab.

2 Choose the Save option.
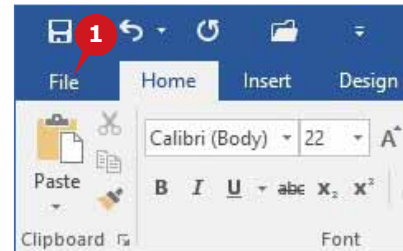
When you save a new file for the first time, the Backstage View shows the Save As options to choose the location where you want to save the document.

A OneDrive: Allows you to save the document online to OneDrive cloud. You need an active internet connection and a Microsoft OneDrive account.
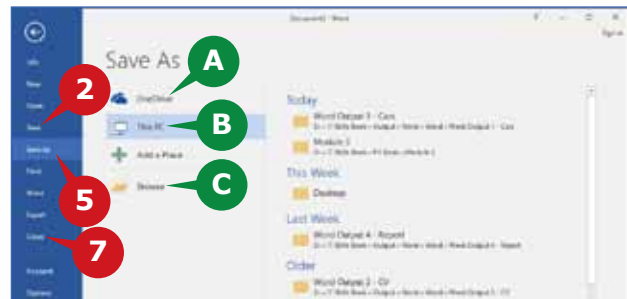
B This PC: Allows you to save the document locally on the computer. You can choose from the recent folders shown on the right side.

C Browse: Allows you to choose a folder location manually on the computer.

After choosing any of the above locations, the **Save As** dialog box is displayed.
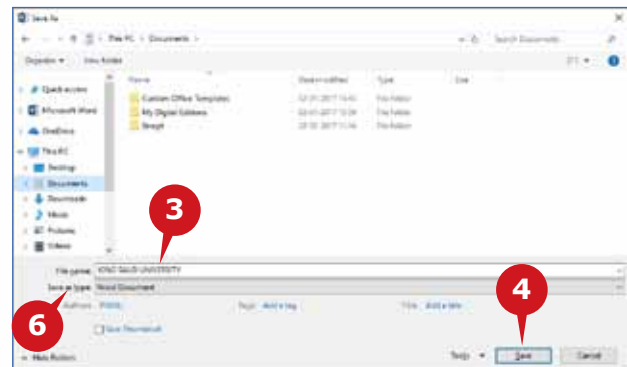
TIP

To Save a document, you can also use the **Save** icon on the **Quick Access Toolbar** or the Keyboard Shortcut **CTRL + S.**

3 Enter the name in the File name box.

4 Click on the Save button.

When you make changes to your document after saving and want to save the updated file, you can repeat steps 1 and 2.

USING SAVE AS OPTION

The Save As option is used to save a copy of an existing document with a new name in the same or different location. You can also choose a different format such as PDF, Web page, Word 97-2003 document, etc.

The steps for using the **Save As** option are almost same as saving a document for the first time, as mentioned above, except the following:

5 Select the Save As option in the *Backstage view.*

6 Choose the file type in the Save as type option in the Save As dialog box.

CLOSING A DOCUMENT

Word 2016 allows you to close a document without closing the application. If any open document is unsaved, Word 2016 will prompt you to save your document before closing.

To close a document without closing the Word 2016 application,

7 Click on Close option in the *Backstage view.*

TIP

*If there is only one open document, clicking on "**X**" button at the top right corner of the title bar will quit Word 2016 by closing the document.*

OPENING AN EXISTING DOCUMENT

To open an existing document, follow the steps given below:

1 Click the File tab and select the Open command.

2 Choose the desired file from the Recent files list that appears in the *Backstage view.*

3 If the desired file is not listed, click the Browse option to display the file Open dialog box.

4 Browse and select the file you want to open.

5 Click the Open button.
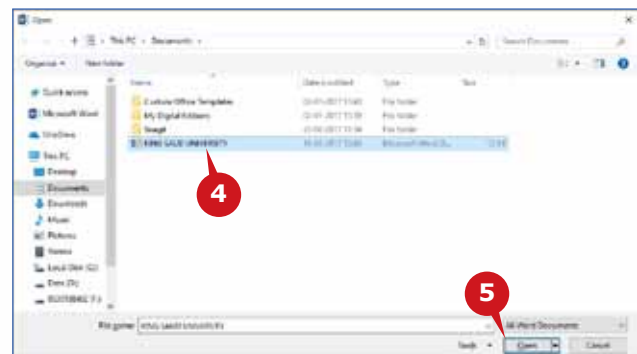
PINNING A RECENT DOCUMENT

When the list of recent documents is full and you open a new or existing document, the last document in the recent document list is removed. You may wish to have certain important documents displayed in this list at all times for quick access. For this, you may pin them to the **Recent Documents** list.

To pin a document to the recent documents list, follow the steps given below:

1 Point to the document you want to Pin in the recent documents list. This highlights the document and shows a Pin symbol in the right end.

2 Click on the Pin Symbol to add it to the *Pinned* group.
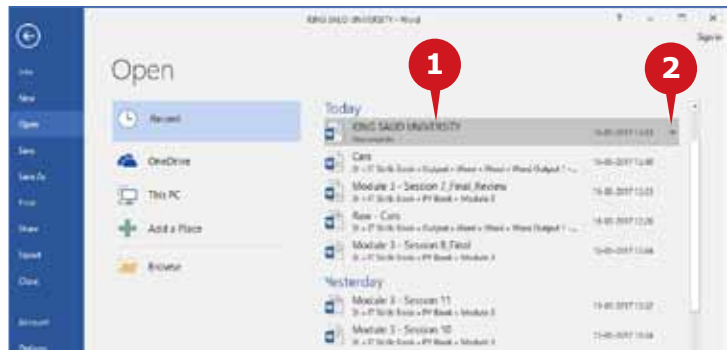
You can **unpin** a pinned document by simply clicking on its pin symbol.

PRINTING A DOCUMENT

You can print a document to get a hardcopy on paper.
To print a document,

1 Choose the Print command from the File Tab. The *Backstage View* shows the Print interface and a preview of the current page.

TIPS

Keyboard Shortcuts

Create a New Blank Document	**CTRL + N**
Save a Document	**CTRL + S**
Open a Document	**CTRL + O**
Close a Document	**CTRL + W**
Save As a Document	**F12 KEY**
Print a Document	**CTRL + P**

ACTIVITIES

Activity 1

Choose the correct option for the following statements.

1. Which of the following is not an application software?

   a. Microsoft Word

   b. Photoshop

   c. Microsoft Edge

   d. Windows 10

2. _____ on the right of the ribbon tabs allows you to quickly get to commands and features you want to use.

   a. Status Bar

   b. Smart Lookup

   c. Tell Me box

   d. Toot tip

3. To erase a character to the right of the cursor, press the _____ key.

   a. Delete

   b. End

   c. Backspace

   d. Home

4. _____ is the default file extension for a document in Word 2016.

   a. .dotx

   b. .docx

   c. .decx

   d. .txt

Activity 2

Fill in the blanks with the appropriate words provided in the box.

CTRL + P	CTRL + Y	CTRL + N	CTRL + A	CTRL + Z

1. The keyboard shortcut to Undo the changes in a document is _____.
2. The keyboard shortcut to select entire document is _____.
3. The keyboard shortcut to Print a document is _____.
4. The keyboard shortcut to create a New blank document is _____.

Activity 3

Practice the following tasks on your computer.

1. Create a new Microsoft Word document. Type the text "Welcome" and save the file with the name "Practice". (**Hint**: You can save this file to the documents folder.)

2. Open the document "Practice". (**Hint**: You can open it from the Recent option.)

3. Pin the "Practice" document to the recent files list.

4. Create a new document using the template "Welcome to Word".

Session 8

THE HOME TAB

OBJECTIVES

General Objectives

In this Session, you will learn about the **Clipboard** group, **Font** group and **Paragraph** group of **Home** Tab.

Specific Objectives

At the end of this Session, you should be able to understand and Practice:

- **The Home Tab**
  - Clipboard Group
  - Font Group
  - Paragraph Group

LEARNING

THE HOME TAB

You learnt about the File Tab in the previous session. The next tab after it in Word 2016 is the Home Tab. Home tab is generally used to format the documents. You can use effects like Bold, Italic, Underline, Size of Text, Alignment of Text, Quick Styles and Formatting of whole paragraph, etc. You can also use it to find and replace words or phrases in the document.

The Home Tab commands are divided into five groups.

- **A** Clipboard: This group contains the main editing commands such as Cut, Copy and Paste.
- **B** Font: This group commands enable you to modify and enhance the appearance of your text.
- **C** Paragraph: This group commands enable you to format complete paragraphs.
- **D** Styles: This group commands enable you to apply pre-defined formatting styles.
- **E** Editing: This group commands help you to find and replace text as well as select text or objects.

CLIPBOARD GROUP

The First group in Home tab is the Clipboard group, which enables you to access and use contents of the Office Clipboard.

A clipboard is a temporary storage area where text or other data, which has been **cut or copied** from a file, is stored.
There are four commands in the Clipboard: **Cut, Copy, Paste, Format Painter.**

COPY

The **Copy** command stores a copy of the selection on the **Clipboard** so you can paste it somewhere else.

To **copy** the text, follow the steps given below:
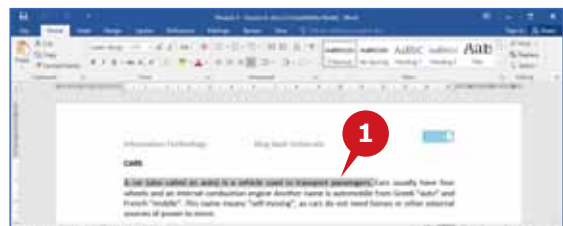
1 Select the text you want to copy.

2 Click Copy from clipboard group or press CTRL + C.

3 Place the cursor to the position you want to paste and click Paste command or press CTRL + V.
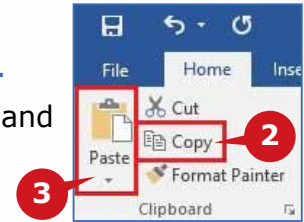
CUT

The **Cut** command removes the selection and stores it on the **Clipboard** so you can paste it somewhere else.

To **Cut** (or Move) the text, follow the steps given below:

1 Select the text you want to cut.

2 Click Cut from clipboard group or press CTRL + X.

3 Place the cursor to the position you want to paste and click Paste command from Clipboard group or press CTRL + V.
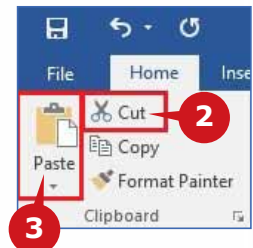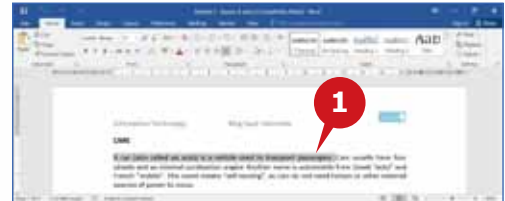
PASTE

The **Paste** command is used to add content from the Clipboard to your document.

To paste the contents of the clipboard to the current cursor position, click the **Paste** from the Clipboard group or use the shortcut **Ctrl + V.**

PASTE OPTIONS

The Paste command provides you with different paste options, such as to paste the text with the source format or to match the destination format. To display the Paste options, click on the **arrow** below the Paste command.

A Keep Source Formatting: Preserves the style of the original text.

B Merge Formatting: Changes the formatting so that it matches the text that surrounds it.

C Keep Text Only: Removes all the original formatting from the text.
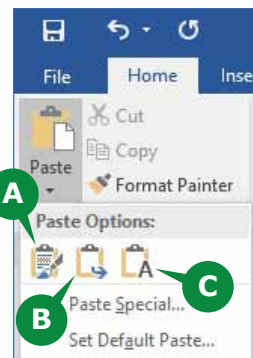
USING DRAG AND DROP

Moving or Copying text/object using Mouse is called Drag and Drop.
To **Move** the selected text, click and hold the left mouse button and drag it to the new place.

To **Copy** the selected text, click and hold the left mouse button along with **CTRL** key and drag it to the new place.

Session 8

FORMAT PAINTER

Do you like the look of a particular selection? You can apply that look to other content in the document. The **Format Painter** command is used to copy the formatting applied to a section of text to another section of text.

To apply the **formatting** style of the selected text,

1 From the Clipboard group, click Format Painter. Your mouse pointer changes to a paint brush. Now drag it over the text to which you wish to apply the formatting.
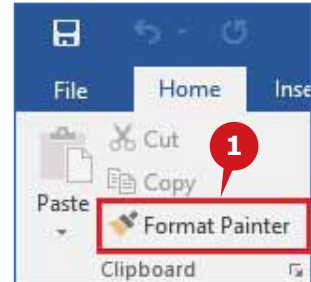
TIP

If you wish to apply the selected formatting at multiple places, double-click the **Format Painter** command. You can then drag over multiple areas. Press **Escape Key** when done.

CLIPBOARD PANE

The Clipboard pane is used to see all the items you have cut or copied to the Clipboard.

To open the clipboard pane, follow the steps given below:
1 Click the Home tab
2 In the Clipboard group, click the Dialog Box Launcher to display the Clipboard pane.
3 Here you can see all items that you have copied or cut. Click any item to insert it individually.
A Paste All: This button is used to insert the complete content from the clipboard.
B Clear All: This button is used to clear all the content from the clipboard.
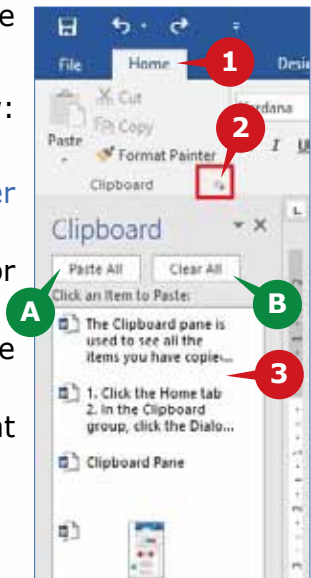
FONT GROUP

The next group of **Home** tab after **Clipboard** is **Font**. This group consists of commands that enable you to modify and enhance the appearance of your text.

FONT

A **Font** is a graphical design (typeface) having particular size, weight, and style for a set of characters. The **Font** box is used to change the font of selected text. It lets you pick a new font for your text.
To change the Font of the selected text, follow the steps given below:

1 Click the arrow to the right of the Font box.

2 Select the desired font from available fonts.

The new font is applied to the selected text.
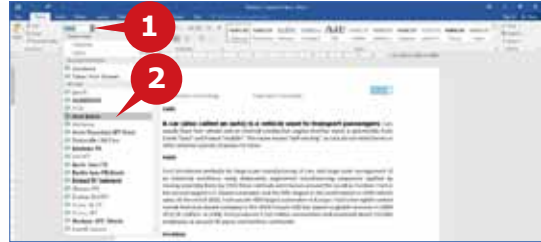
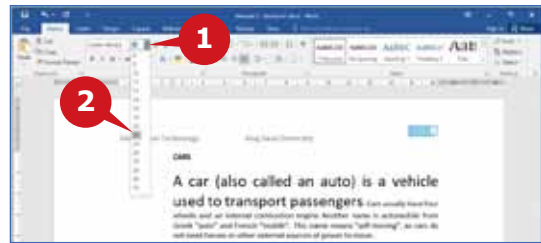## FONT SIZE

The **Font Size** box is used to change the size of selected text.

To Change the size of the selected text, follow the steps given below:

1 Click the arrow to the right of the Font Size box.

2 Select the desired font size from the font size list.

INCREASE FONT SIZE AND DECREASE FONT SIZE

Word 2016 also gives you the following two options to change the font size.

A The Increase Font Size icon is used to make your text a bit bigger.

B The Decrease Font Size icon is used to make your text a bit smaller.

FONT COLOR

The **Font Color** command is used to change the color of text. Using different colors makes text more attractive.

To change the Font color of the selected text, follow the steps given below:

1 Click on the arrow to the right of the Font Color command.

2 Select the desired color.
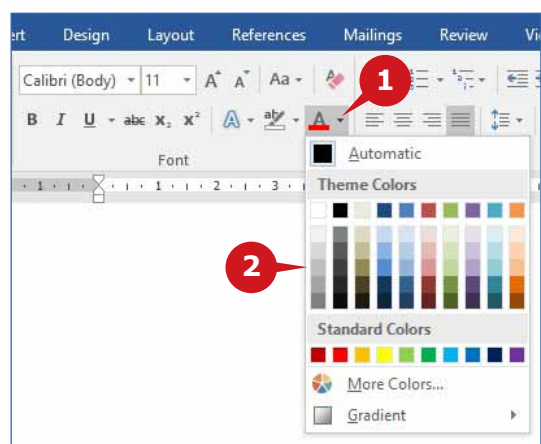
FONT STYLE: BOLD, ITALIC, UNDERLINE

Word 2016 permits you to apply the following text styles to your document:

A The **Bold** command is used to make text appear thicker.

B The *Italic* command is used to make the selected text slant to the right.

C The Underline command is used to draw a line below text. On clicking the small arrow besides underline icon, more underline options are available like Double Underline, Thick Underline, etc.

To apply the **bold** effect to the selected text, follow the steps given below:

1 Select the text to which you want to apply bold effect.

2 Click on Bold command in the Font group.

In the same way you can change the text to italic (I) and underline (U).
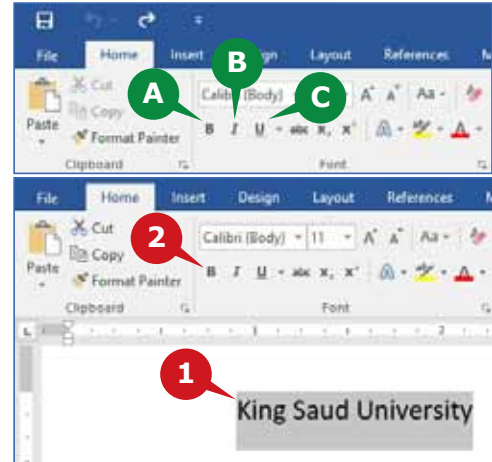
CHANGE CASE

Word 2016 allows you to change the capitalization of the selected text to uppercase, lowercase, etc. The different available options are as follows:

A Sentence case - Only the first letter of the sentence is capitalized.

B lowercase - Changes the selected text to small letters.

C UPPERCASE – Changes the selected text to capital letters.

D Capitalize Each Word – Makes the first letter of each word capital.

E tOGGLE cASE – Changes the capital letters to small & small to capital.
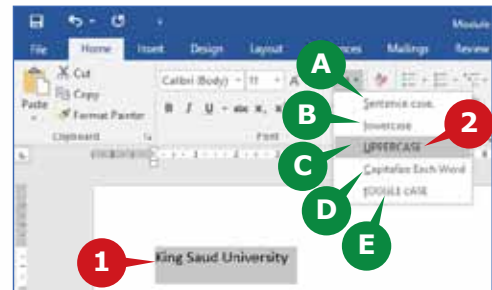
To Change Case of the text, follow the steps given below:

1 Select the text for which you want to change case.

2 Click the Change Case command of font group and select the desired case.

TEXT HIGHLIGHT COLOR

The **Text Highlight Color** command is used to make your text pop by highlighting it with a bright color.

To apply a text highlighter to the selected text, follow the steps given below:

1 Click the Text Highlight Color command of font group.

**2** Select the color you want.

160
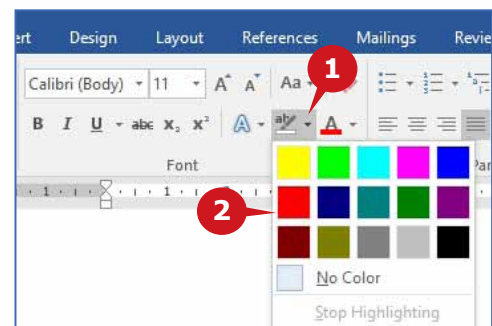
TEXT EFFECTS AND TYPOGRAPHY

The **Text Effects and Typography** command is used to apply various effects to selected text. You can add some flair to your text by applying a text effect. Additionally, you can select **Outline**, **Shadow**, **Reflection** and **Glow** effects from the list. You can also change the typography settings to enable a stylistic set.

To apply the text effect to the selected text, follow the steps given below:

1 Click on the Text effect command of font group.

2 Select the desired effect.
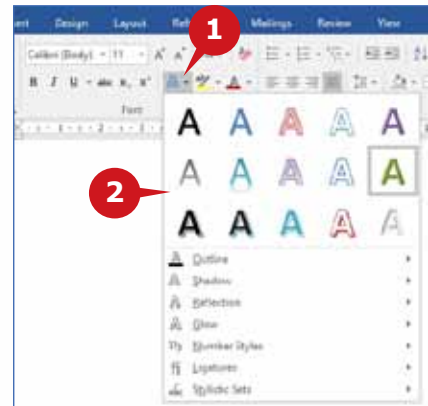
CLEAR ALL FORMATTING

Clear All Formatting command removes all formatting from the selection, leaving only the normal, unformatted text.

To clear all the formatting from the selected text,

1 Click on Clear All Formatting command of font group.
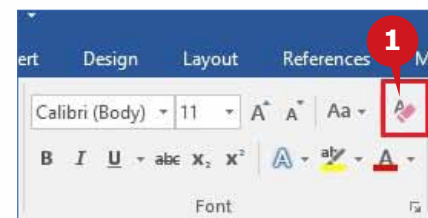
STRIKETHROUGH

The **Strikethrough** command is used to draw a line through the middle of selected text so that it indicates the text is stroked/cancelled out.

To apply the Strikethrough effect to the selected text,

1 Click on the Strikethrough command of font group.
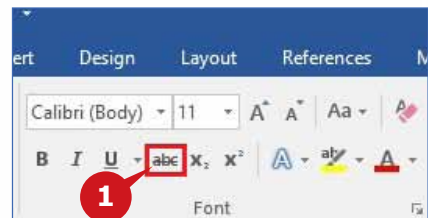
TIP

You can also apply *Double Strikethrough* from effect option available in Font dialog box.

SUBSCRIPT AND SUPERSCRIPT

The **Subscript** command is used to type letters in very small size, just below the line of text. For example, **H_2O**.
Similarly, the **Superscript** command is used to type letters in very small size, just above the line of text. For example, **$(A+B)^2$.**

To apply the Subscript/Superscript to the selected text,

**1** Click **X_2** (Subscript) or **X^2** (Superscript) command as desired.

Session 8
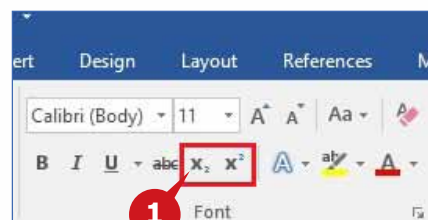
FONT DIALOG BOX

The **Font** dialog box is used to apply a combination of various formatting effects. You can customize your text using advanced font and character options to give it the exact look you want. You can add a variety of styles and colors to your text, as well as visual effects, like strikethrough, superscript and all caps.

To open the **Font** dialog box, follow the steps given below:

1 Click the Dialog Box Launcher in the Font group to display the Font dialog box.

2 Choose the effects as per your requirements and click the OK button.
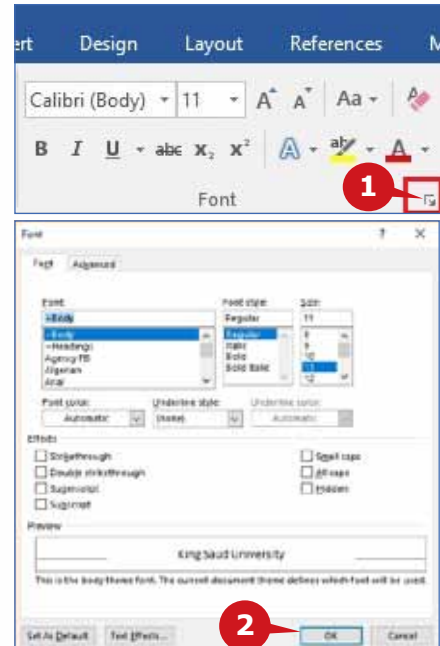
TIP

The shortcut to open the Font Dialog box is **Ctrl + D**.

PARAGRAPH GROUP

In the Font group, you learnt to change the typeface and type settings of your text. Most of the commands in the Font group deal with the individual characters. However, in order to work with the complete paragraph, Word 2016 provides you with the Paragraph group. The commands in this group enable you to format complete paragraphs.

ALIGNMENT

Alignment refers to the way text is positioned horizontally in a given paragraph.

There are four types of text Alignments:

A Align Left (Ctrl + L): This command aligns your content with the left margin. It is commonly used for body text and makes the document easier to read.

B Centre (Ctrl + E): This command aligns your content in the center. It gives documents a formal appearance and is often used for cover pages, quotes, and sometimes headings.

C Align Right (Ctrl + R): This command aligns your content with the right margin. It is used for small sections of content, such as text in a header or footer.

D Justify (Ctrl + J): This command distributes your text evenly between the margins. It gives your document clean, crisp edges so it looks more polished.
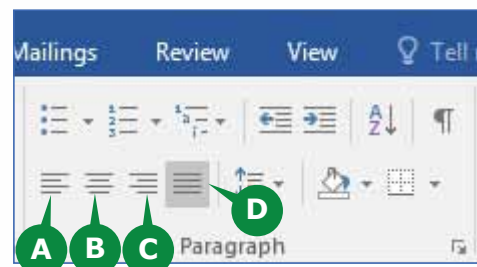
INDENTATION

Indentation determines the distance of the paragraph from either the left margin or the right margin. **Increase Indent** moves your paragraph farther away from the left margin. **Decrease Indent** moves your paragraph closer to the left margin.
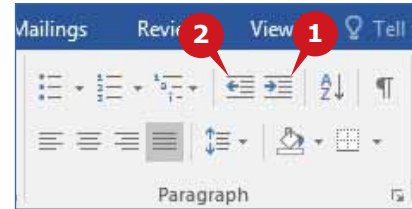
1 Click on the Increase Indent command to move the paragraph towards right.

2 Click on the Decrease Indent command to move the paragraph back to its original position.

TIP

You can also use the horizontal Ruler just below the Ribbon for Indentation.

LINE AND PARAGRAPH SPACING

The **Line and Paragraph Spacing** command enables you to choose how much space appears between lines of text or between paragraphs.

It provides you with the following two options:

A Add Space Before Paragraph

B Remove Space After Paragraph

To change the line spacing in a paragraph, follow the steps given below:

1 Select the lines or paragraphs to which you want to apply the line spacing.

2 Click on the line spacing command in paragraph group and choose the desired line spacing from the list.
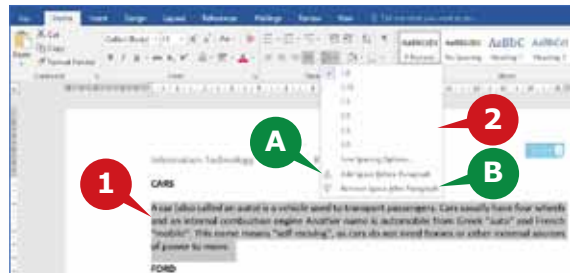
TIP

To apply the same spacing to your whole document, use the **Paragraph Spacing** command on the **Design** tab.

BULLETS AND NUMBERING

Bullets and Numbering help you to create a bulleted or numbered list in your document.

A Bullets: This command allows you to create a bulleted list.

B Numbering: This command allows you to create a numbered list.

To create a Bulleted/Numbered list for the selected text, follow the steps given below:

1 Click the arrow to the right of the Bullets/Numbering command.

**2** Select the desired format.
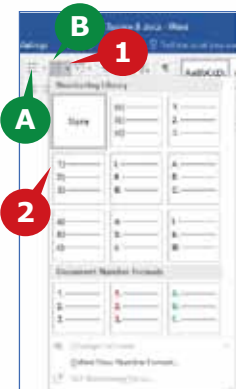
BORDERS

This command is used to add or remove borders from your selection.

To apply a border to a paragraph, follow the steps given below:

1 Select the text for which you want to apply border.

2 Click on the Borders command of paragraph group and choose desired border.

A Borders and Shading: This option allows you to explore additional border options, such as line color and line width.
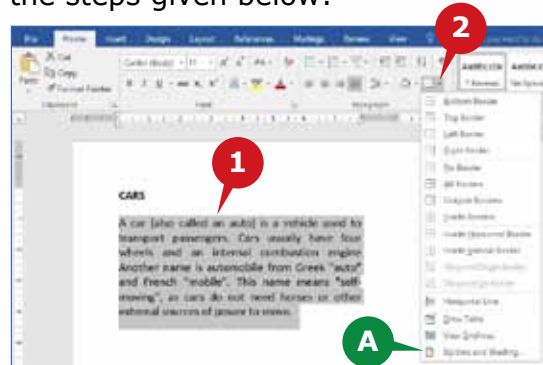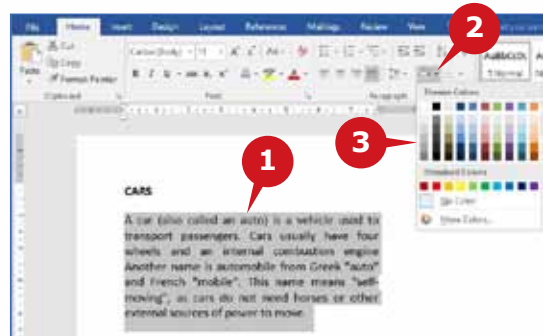

SHADING

Shading command is used to change the color behind the selected text, paragraph or table cell.

To apply shading to the text, follow the steps given below:

1 Select the text or line to apply shade.

2 Click on the arrow to the right of the Shading command of the paragraph group.

3 Select the desired color from the color palette.

PARAGRAPH SETTINGS

The **Paragraph Settings** dialog box is used to apply a combination of various paragraph formatting effects. You can fine-tune the layout of the selected paragraph, including spacing, indentation, and more.

To open the **Paragraph Settings** dialog box, follow the steps given below:

1 Click the Dialog Box Launcher in the Paragraph group.

2 Choose the effects as per your requirements and click the OK button.
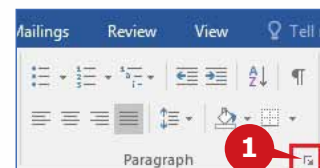
ACTIVITIES

Activity 1

Choose the correct option for the following statements.

1. Which operation you will perform to move the selected text from one place to another?

   a. Copy and Paste

   b. Cut and Paste

   c. Paste and Delete

   d. Paste and Cut

2. Characters that are smaller than normal text and typed just above the line of text is known as _____.

   a. Strikethrough

   b. Decrease Font Size

   c. Superscript

   d. Subscript

3. _____ command is used to make your text look like as if you have highlighted it with a highlighter pen.

   a. Shading

   b. Font Color

   c. Highlighter pen

   d. Text Highlight Color

4. _____ option from the Change Case command, makes the selected text into capital letters.

   a. Lowercase

   b. Sentence case

   c. Uppercase

   d. Capitalize each word

Activity **2**

Fill in the blanks with the appropriate words provided in the box.

Ctrl + E	Ctrl + U	Underline	Ctrl + D	Strikethrough

1. The keyboard shortcut to Underline the selected text is _____.

2. The _____ command allows you to draw a line through the middle of selected text.

3. The keyboard shortcut to open font dialog box is _____.

4. _____ is the shortcut key to Center Align the selected text.

Activity **3**

Practice the following tasks on your computer.

1. Create a new blank document and type the text "Welcome". Change the size of text to "14" and apply the font "Verdana". (**Hint:** You can save this file on the desktop.)

2. Type the text "King Saud University" and apply the font styles "Bold and Underline", font color "Purple" and highlight the text in "Yellow" color.

3. Copy the formatting styles of the text "King Saud University" to the text "Welcome".

4. Insert a random sample paragraph in the document by typing **"=rand()"** function and press the Enter key. Change alignment of the paragraph to "justify" and change the line spacing to "1.5".

THE HOME TAB & THE INSERT TAB

OBJECTIVES

General Objectives

In this Session, you will learn about the **Styles** and **Editing** groups of the **Home** tab and the **Pages** and **Tables** groups of the **Insert** Tab.

Specific Objectives

At the end of this Session, you should be able to understand and Practice:

- **The Home Tab**
  - Styles Group
  - Editing Group

- **The Insert Tab**
 - Pages Group
  - Tables Group

LEARNING

THE HOME TAB

There are five groups in the Home Tab. In the previous session, you learnt about the Clipboard group, the Font group and the Paragraph group. In this session, you will learn about the remaining two groups of the Home tab i.e. the **Styles** group and the **Editing** group.

STYLES GROUP

The Styles group commands enable you to apply pre-defined formatting styles to text. These styles provide an enhanced look to topics, subtopics, etc. Using the styles group, you can preview, manage and customize the text styles in Word 2016.

APPLYING STYLES

A style is a pre-defined set of formatting characteristics, such as font name, size, color, paragraph alignment, and spacing. Some styles even include borders and shading.
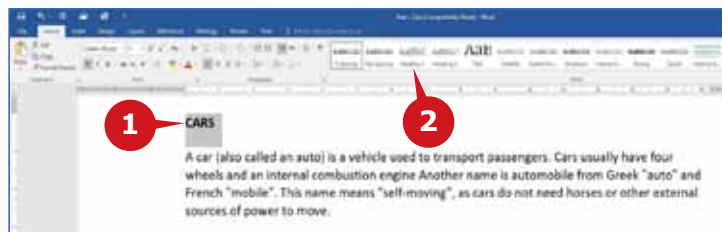
To apply a heading style to the text, follow the steps given below:

1 Select the text.

2 Click on the Heading 1 style (or any other style) from the Styles gallery.

EDITING GROUP

The commands in the Editing group enables you to search, replace, or select text and objects in your document.

FIND

The Find command enables you to search and locate the text or phrase in the whole document. It lets you open a **Navigation Pane** to search through the document.
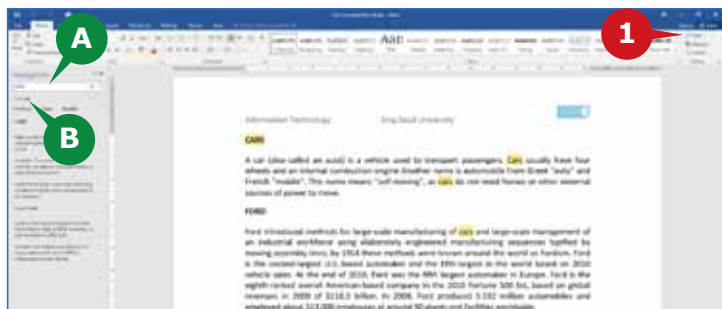
To open the navigation pane,

1 Click the Find command in the Editing group.

A The Navigation pane appears in the left side of the screen. Here, you can type the word or phrase to search for in the whole document.

B Below the search box, you will get the total number of words available in the document.

REPLACE

The Replace command enables you to replace the text or a phrase with another text or phrase in the document. Using this feature, you can search for the text that you would like to change, and replace it with the desired text.

To replace a word or phrase in your document, follow the steps given below:

1 Click the Replace command in the Editing group.

A This displays the Replace tab of the Find and Replace dialog box.
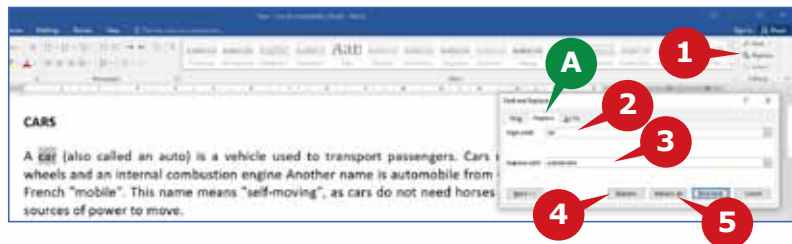
2 Enter the text you wish to find in the Find what box.

3 Enter the desired text in the Replace with box.

4 Click the Replace button.

5 You may click the Replace All button to replace all occurrences of the searched text by the new text.

SELECT

The Select command in the Editing group is used to select text or objects in your document. This is particularly helpful for selecting text with certain formatting or objects that are behind text.

TIPS

Keyboard Shortcuts

Find text or phrase in the document	**CTRL + F**
Maximize or restore a selected window	**CTRL + F10**
Switch to the next window	**ALT + TAB**
Replace	**CTRL + H**

THE INSERT TAB

The Insert Tab has a lot of useful features that enable you to insert different items in your document. You can insert cover page, table, pictures, shapes, chart, hyperlink, drop cap, etc. in your document.

The commands in the Insert Tab are divided into several groups. You will learn about some of these groups in the following section.
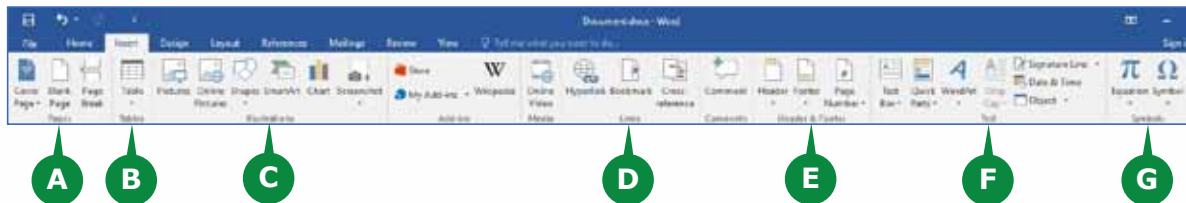
- **A** Pages
- **B** Tables
- **C** Illustrations
- **D** Links
- **E** Header & Footer
- **F** Text
- **G** Symbols

PAGES GROUP

The commands in this group lets you insert a Cover Page, a Blank Page or a Page Break.

COVER PAGE

A cover page is the first page of article, book, or any word document. Your document will make a great first impression with a stylish cover page. A good cover page draws the attention of the reader.

The **Cover Page** command is used to insert a cover page at the beginning of the document. On the cover page, you provide information like Subject, Title, Topic, Author name, etc.

To insert a cover page, follow the steps given below:

1 Click on the Cover Page command of the Pages group.

2 Choose the desired cover page.

BLANK PAGE

The **Blank Page** command is used to add a blank page anywhere in your document. This is useful when you need to insert a new page between two existing pages.
To insert a blank page at the current cursor position,

1 Click on the Blank Page command of the Pages group.
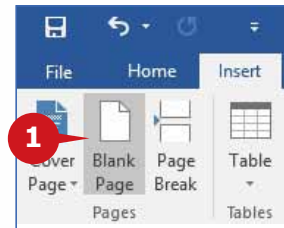
PAGE BREAK

The Page Break command is used to end the current page at the cursor position and move the cursor to the next page. This is useful when you want to write on the next page even though there is some blank space below the text at the current page.

To insert a page break at the current cursor position,

1 Click on the Page Break command of the Pages group.
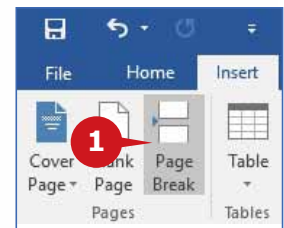
TABLES GROUP

The **Tables** group in the **Insert** tab contains only one command i.e. Table. It is used to insert a table in your document. A table contains data or information in the form of rows and columns. In a table, **column** is the **vertical** part and **row** is the **horizontal** part. An intersection of a column & a row is called a **Cell**.

INSERTING TABLE

To insert a table in the document, follow the steps given below:

1 Click on the Table command of the Tables group.

2 Click on the Insert Table option from the list. This will open an insert table dialog box.

3 In the Insert Table dialog box, enter the Table size with respect to number of columns and rows.

4 Click OK to insert the table.

A You can also insert a table by moving the mouse over the squares to select the number of rows and columns as required.
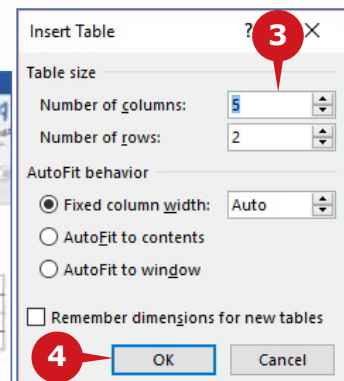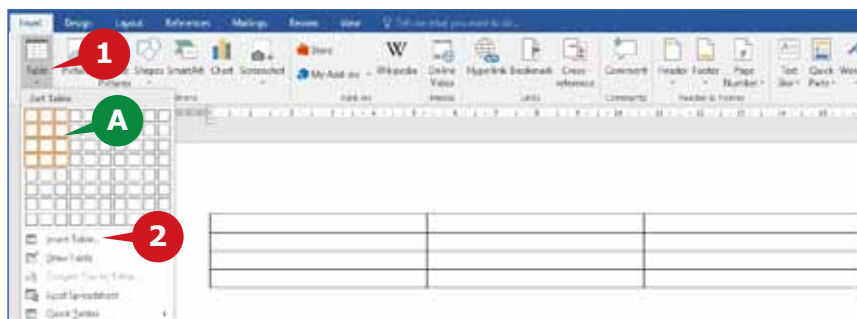
Entering Table Data

To enter data into a table, simply click the cell where you want to enter the data. Press the **Tab** key to move to the next cell. Use the **arrow keys** to move between the cells.

CONTEXTUAL TABS FOR TABLE (DESIGN AND LAYOUT)

When you click inside a table, two contextual tabs, namely, **Design** and **Layout**, appear under the heading **Table Tools**. These tabs provide commands for quickly formatting your table, insert or delete rows and columns, and set the alignment for cells in your table.

RE-SIZING AND MOVING A TABLE

You can change the size and position of a table as required. Placing the mouse pointer at the bottom right corner displays a two headed arrow and placing it at the top left corner shows a four headed arrow.

To quickly re-size the table, follow the steps given below:

1 Drag the resize handle at the bottom right corner of the table to an appropriate size.

2 To change the width of a column or the height of a row, place the pointer on a boundary and drag when it appears as a two headed arrow.

3 To move your table, place the pointer at the four-headed arrow on the top left corner and drag with your mouse to a new location.
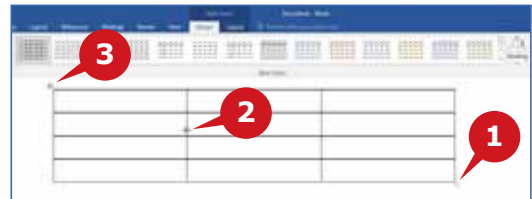
INSERTING ADDITIONAL ROWS OR COLUMNS

Word 2016 allows you to insert additional rows or columns in the table using the contextual **Layout** tab.

To insert additional rows or columns, follow the steps given below:

1 Click in the table where you need additional rows or columns.

2 Click on the contextual Layout Tab.

3 In the Rows & Columns group, select one of the following:

A Insert Above to insert a row above the current row.

B Insert Below to insert a row below the current row.

C Insert Left to insert a column to the left.

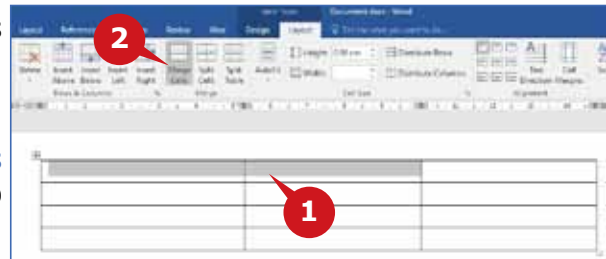**D** Insert Right to insert a column to the right.
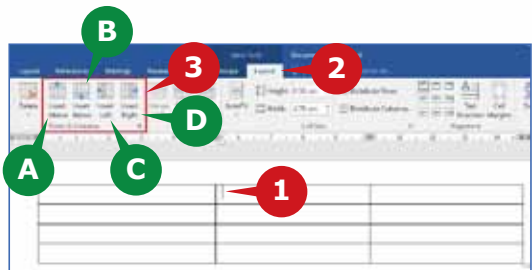
MERGING CELLS

Combining two or more cells together into one cell is called **merging** cells.

To merge cells, follow the steps given below:

1 Select the cells to merge.

**2** Click on the Merge cells command from Merge group of the Layout Tab.

SPLITTING CELLS

Word 2016 allows you to split a cell of a table into multiple new cells.

To split cells of a table, follow the steps given below:

1 Select the cell that you want to split.

2 Click the Split Cells command in the Merge group.

A The Split cells dialog box appears.

3 Enter the number of columns or rows into which you want to split the selected cells and click OK.
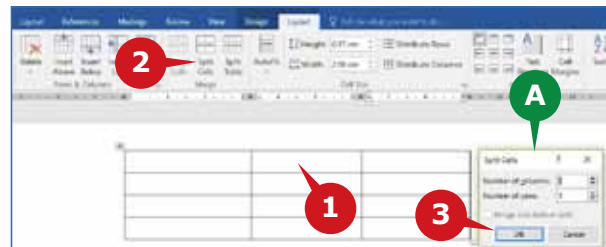
APPLYING TABLE STYLES

A quick way to format a table automatically is to use the Table Style.

To apply a Table Style, follow the steps given below:

1 Select the Table and Click on Contextual Design Tab.

2 In the Table Styles Group, click on the More arrow to display the complete gallery of styles.

3 Move your mouse over the styles to preview how the table will look if you select that style.

4 Click on a suitable style for your table.
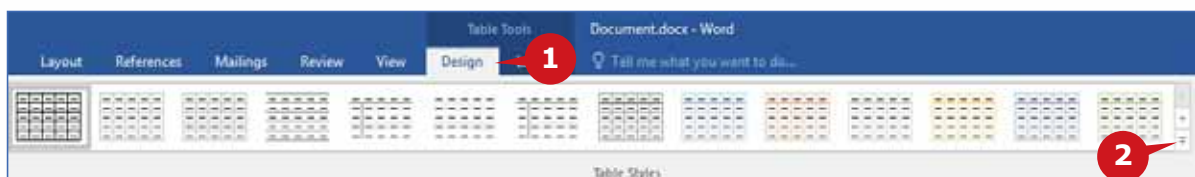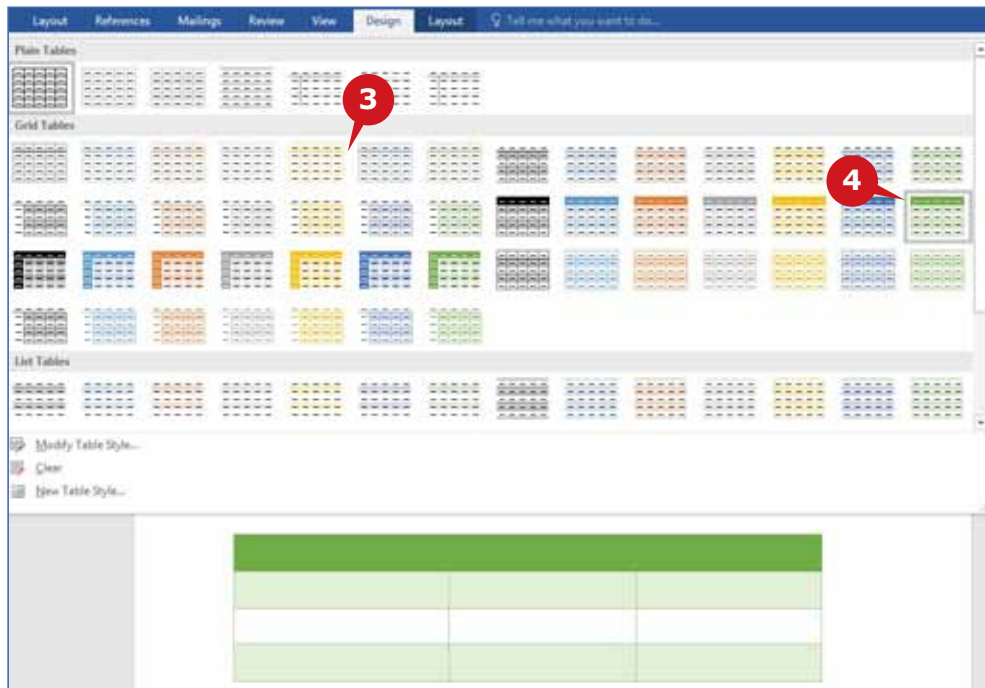
SHADING

The **Shading** command is used to highlight cells in the table. It changes the color behind the selected text, paragraph, or table cell. This is especially useful when you want the information to jump off the page.

To apply the shading, follow the steps given below:

1 Select the cells where you want to apply the shading.

2 Click on the contextual Design tab.

3 In the Table Styles group, click on the Shading command.

4 Choose the desired color from the color palette to apply to the selected cells.
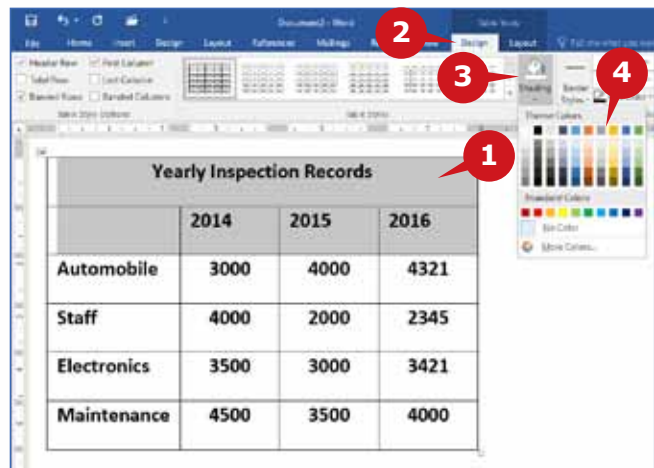
BORDERS

A **Border** is the outlining of a table cell(s), row(s), or column(s). The **Borders** command in the contextual **Design** tab is used to add or remove borders to your selection.

To apply the border to the selected cells, follow the steps given below:

1 Click on the contextual Design tab.

2 Click on the Borders command in the Borders group.

**3** Choose the desired border style from the drop down list.
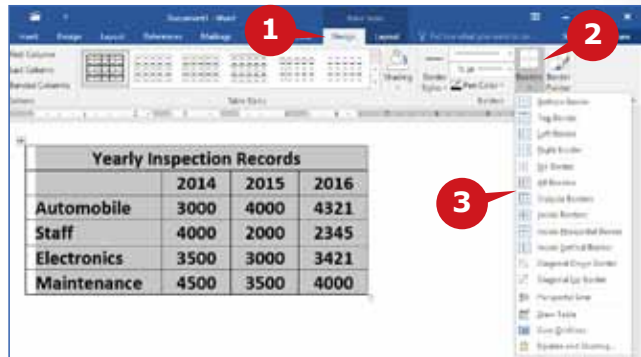
CONVERTING TEXT TO A TABLE

You can create a table from the existing text. The **Convert Text to Table** command in the **Tables** group is used to convert the text separated by separator characters, such as commas or tabs into a table.

To convert the text to a table, follow the steps given below:

1 Insert separator characters—such as commas or tabs—to indicate where to divide the text into table columns.

2 Select all of the text you want to convert to a table.

3 Click the Convert Text to Table option in the Table command.

4 Choose the desired options in the Convert Text to Table dialog box and click the OK button.
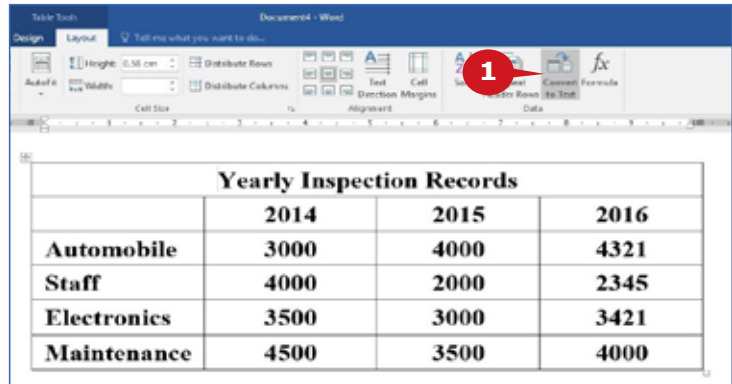
A The selected text is converted into a table.
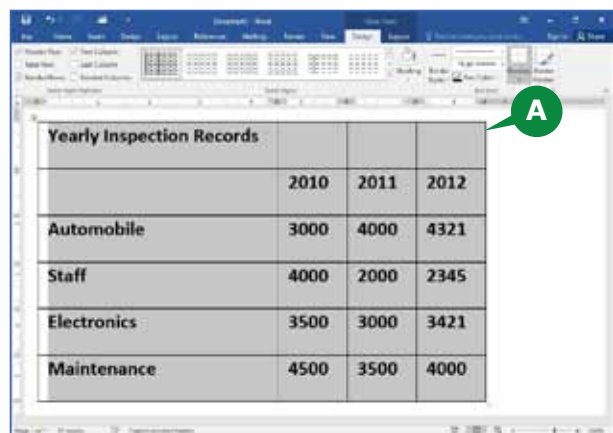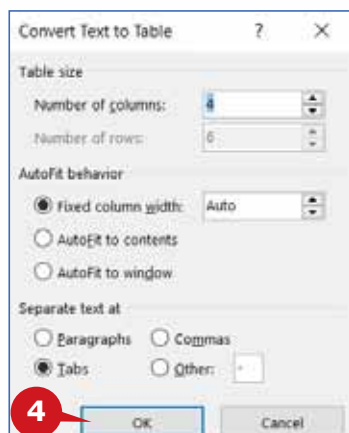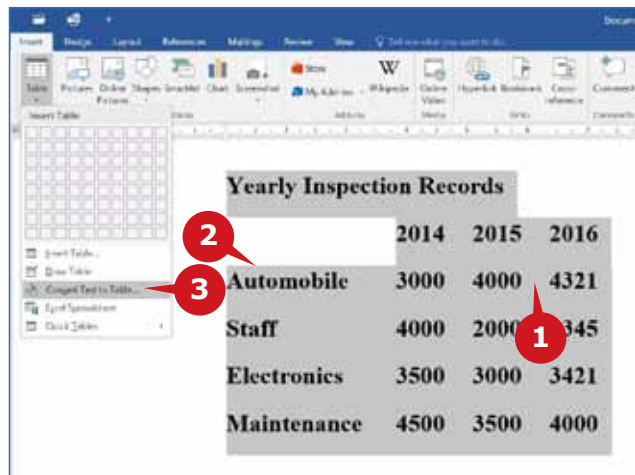
CONVERTING A TABLE TO TEXT

You can also convert the data contained in a table to regular text. The **Convert to Text** command in the contextual **Layout** tab lets you convert a table to regular text. You can choose the separator characters to separate the columns.

To convert a table into text, follow the steps given below:

1 Click within the table and on the contextual Layout tab, in the Data group, click Convert to Text.

**2** Click the option for the separator character that you want to use in place of the column boundaries.

3 Click OK.

A The selected table is converted into text, separated by the separator characters.
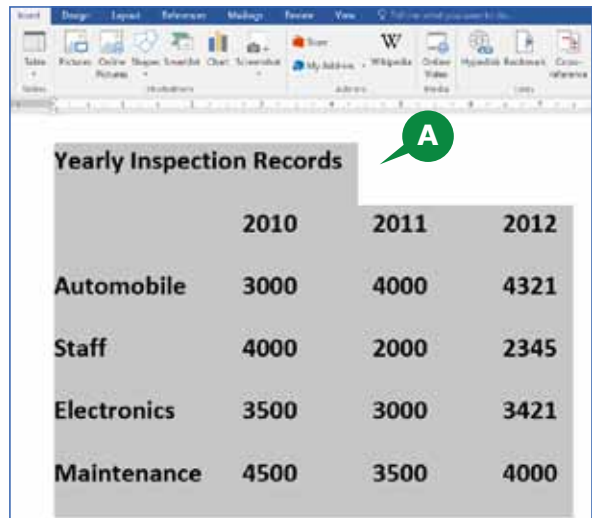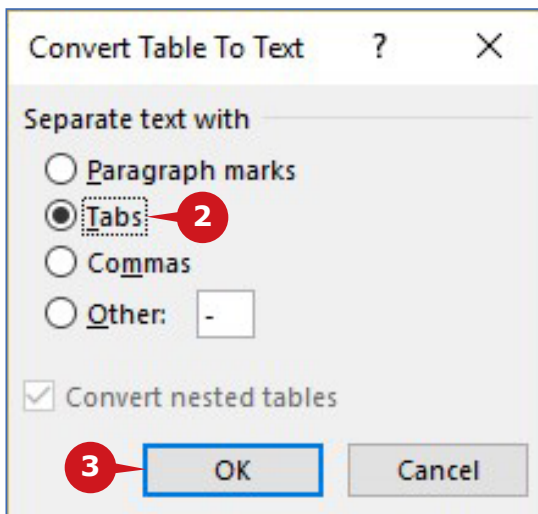
DELETING A TABLE

You can easily delete an entire table, or a part of it, in Word 2016. The **Delete** command in the **Rows & Columns** group of the **Layout** tab lets you delete rows, columns, cells, or the entire table.

Yearly Inspection Records table showing inspection data.
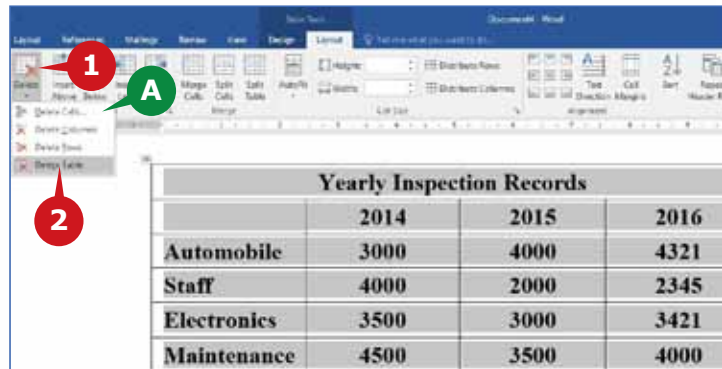
To delete an entire table, follow the steps given below:

1 Click within the table and on the contextual Layout tab, from the Rows & Columns group, select Delete.

A A menu appears.

2 Click the Delete Table option.

TIP

You can also delete selected rows or columns from the Delete Button Options

Session 9

ACTIVITIES

Activity 1

Choose the correct option for the following statements.

1. The _____ feature enables you to change a particular text or phrase with other text or phrase in the document.

    a. Swap

    b. Replace

    c. Find

    d. Styles

2. If you want to give your document an impressive look, you can insert a _____ at the beginning of the document.

    a. Blank Page

    b. Page Break

    c. Page Color

    d. Cover Page

3. A _____ will move the contents after the cursor to the next page.

    a. Blank Page

    b. Table

    c. Page Break

    d. Page Color

4. The _____command is used to insert a new page in your document.

    a. Blank Page

    b. Empty Page

    c. New Page

    d. Page Color

Activity 2

Fill in the blanks with the appropriate words provided in the box.

| Table	Merge Cells	Borders	Shading	Style

1. A _____ is a predefined set of formatting characteristics.

2. A _____ allows you to organize your data in the form of rows and columns.

3. The _____ command allows you to combine two or more cells into one cell in a table.

4. The _____ command is used to add outlines to the selected table cells.

Activity 3

Practice the following tasks on your computer.

1. Create a new blank document. Type the text "Class schedule", apply the style **Heading 1** to it and save the document on the desktop.

2. Prepare your weekly class schedule details in a table format and apply the table style "Grid Table 4".

3. Insert a new row at the top of the table with the title text "Weekly class schedule". (**Hint:** You can merge all the cells of the row.)

4. Replace every instance of the text "schedule" with the text "timetable" throughout the document.
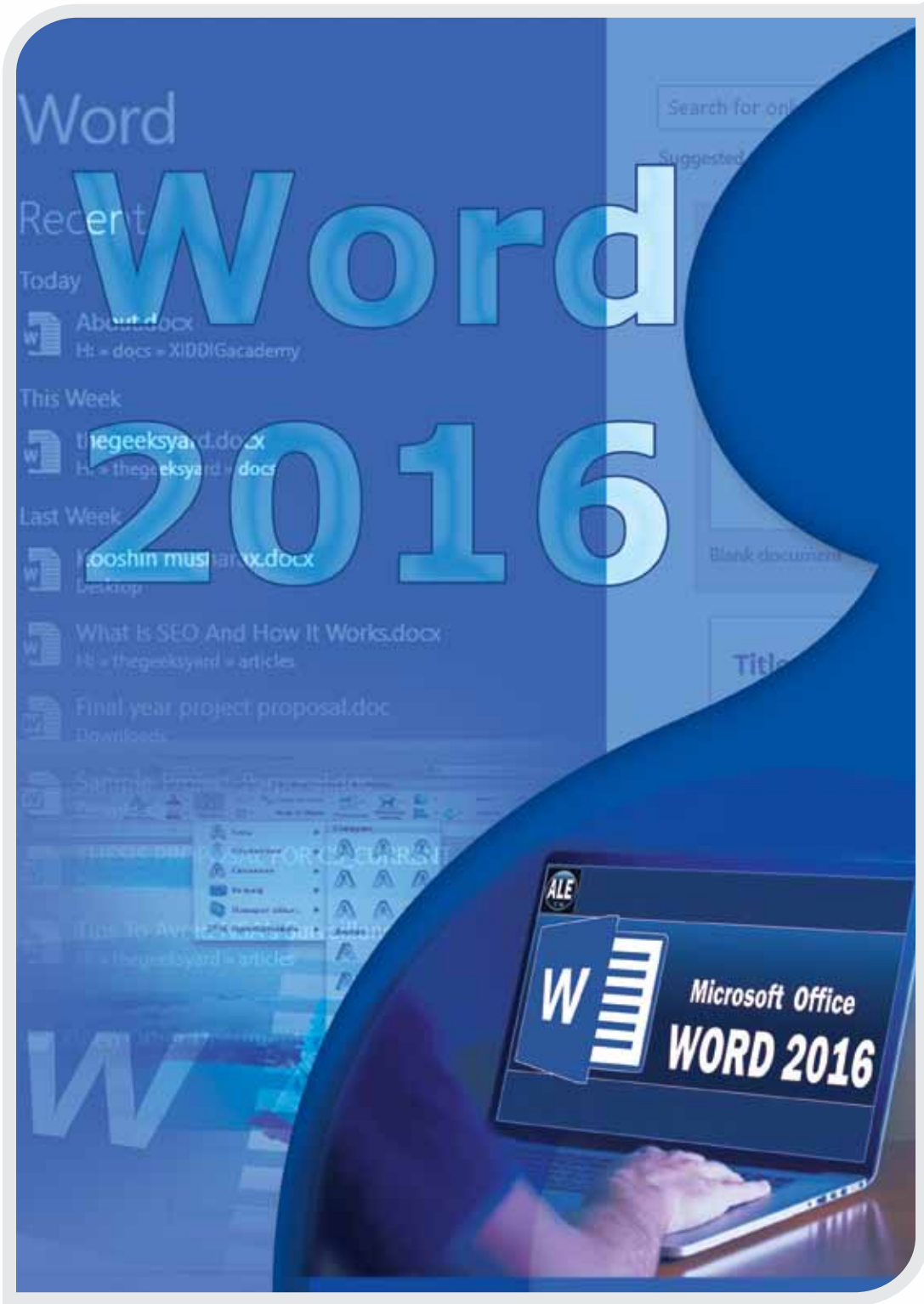
Session 10

THE INSERT TAB

OBJECTIVES

General Objectives

In this Session, you will learn about the **Illustrations** group, the **Links** group, and the **Header & Footer** group of the **Insert** Tab.

Specific Objectives

At the end of this Session, you should be able to understand and Practice:

- **The Insert Tab**
 - Illustrations Group
  - Links Group
  - Header & Footer Group

LEARNING

THE INSERT TAB

There are ten groups in the Insert Tab. In the previous session, the first two groups i.e. the Pages group and the Tables group were discussed. In the current session, you will learn about the **Illustrations** group, the **Links** group, and the **Header & Footer** group.

ILLUSTRATIONS GROUP

The commands in this group enable you to insert various types of illustrations like Pictures, Shapes, Charts, and Screenshots.
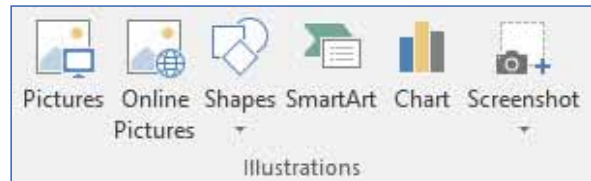
INSERTING A PICTURE

The **Pictures** command lets you insert pictures from your computer or from other computers that you are connected to.

To insert a picture, follow the steps given below:

1 Click in the document where you want to insert a picture.

2 Click on the Pictures command of Illustrations group.

A The Insert Picture dialog box appears.

3 Browse and select the desired picture and click on the Insert button in the dialog box.
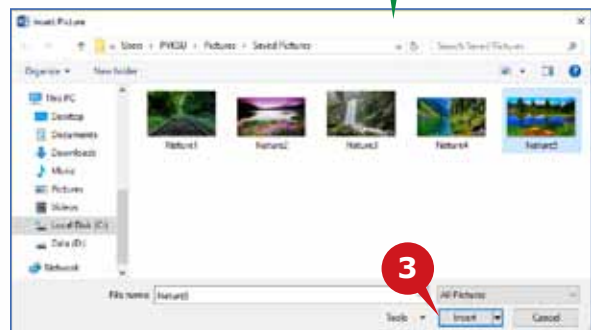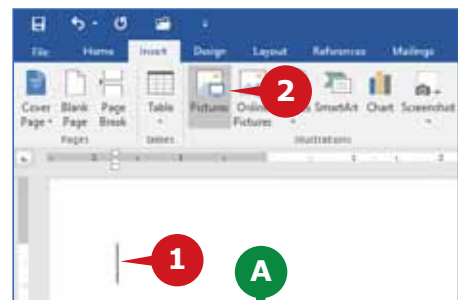
CONTEXTUAL TAB - FORMAT

When you insert a picture, or select an already inserted picture in a document, a new contextual **Format** tab appears. This tab contains various tools, such as brightness, color, corrections, picture styles and size of picture, etc. These tools help you to modify the appearance of your picture.
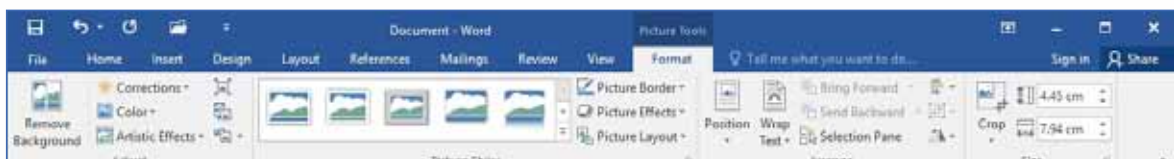
APPLYING ARTISTIC EFFECTS

You can apply various artistic effects to an inserted picture. The **Artistic Effects** command add artistic effects to the picture to make it look more like a sketch or painting.

To apply the artistic effects, follow the steps given below:

1 Select the picture.

2 On the contextual Format tab, in the Adjust group, click the Artistic Effects command.

**A** A gallery of different effects is displayed.

3 Choose a suitable effect.

CROPPING A PICTURE

You can crop a picture to remove any unwanted parts.

To crop the selected picture, follow the steps given below:

1 On the contextual Format tab, in the Size group, click the Crop command.

A Eight cropping handles appear on the edges of the picture.

**2** Drag these handles inwards to remove unwanted parts of the picture.
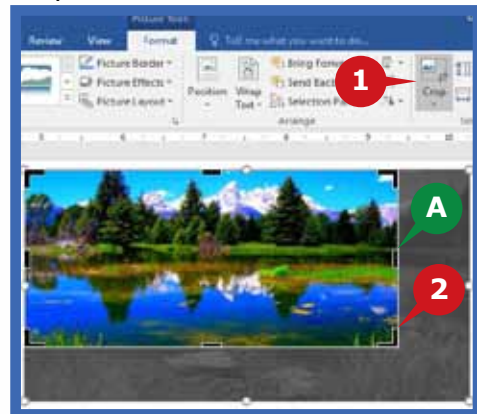
TIP

You may also crop a picture into a specific shape. For this, click the arrow below the **Crop** *command and select* **Crop to Shape**. *Select a suitable shape from the displayed Shapes gallery.*

WRAP TEXT

Wrap Text command makes it easy to arrange the text around an object, such as a picture or a shape, in different ways. For example, you can choose to have the text continue around the object or cross right over it. The default wrapping style is **In Line with Text.** This places the image in line with your text.

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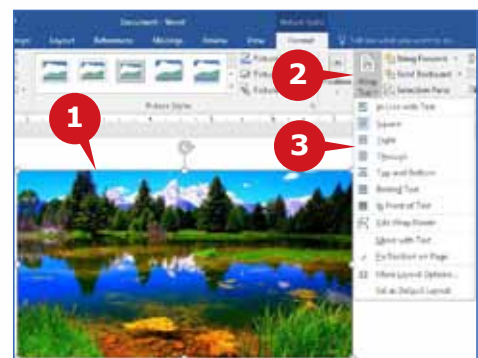
To wrap text around a picture, follow the steps given below:

1 Click the image to select it.

2 On the contextual Format tab, in the Arrange group, click the Wrap Text command.

3 Choose one of the following:

A Square: To wrap text around the border of your image.

B Tight: To wrap text closely around an irregularly shaped picture.

C Through: Text can fill in more of the blank space around the image.

D Top and Bottom: To place the text above and below the image.

E Behind Text: To display the text over the image.

**F** In Front of Text: To display the image over the text.
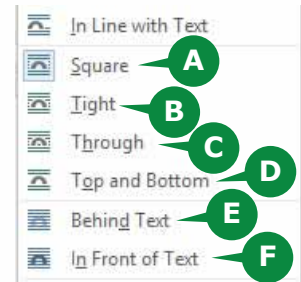
CHANGING PICTURE POSITION

The **Position** command helps you to choose where the selected picture appears on the page. While changing the position of the picture, the text automatically wraps around the picture.

To Change the picture position, follow the steps given below:

1 Click the picture to select it.

2 In the contextual Format tab, from the Arrange group, click the Position command.

3 Move the mouse pointer over the displayed options to preview the picture position and click on the suitable one.
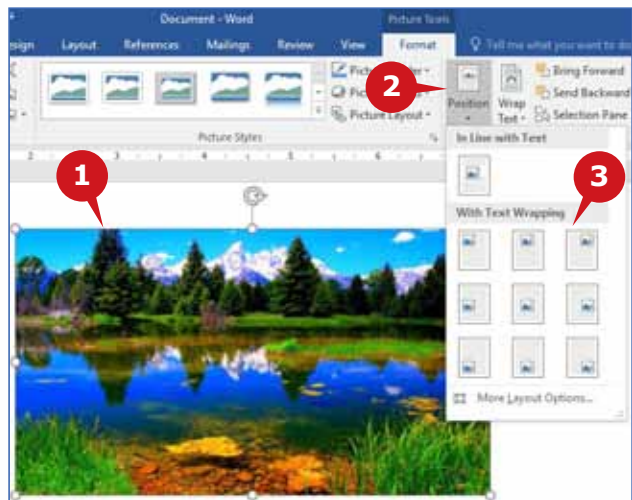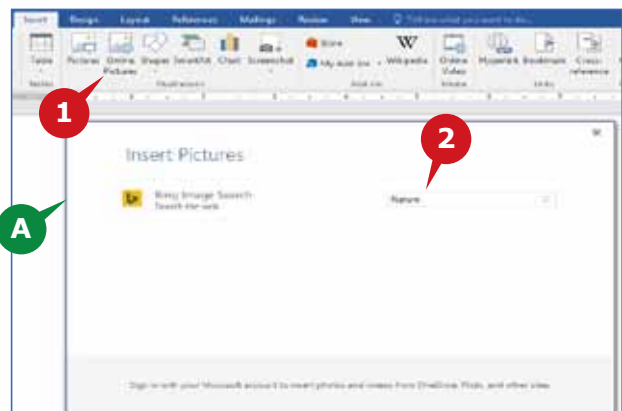

ONLINE PICTURES

The **Online Pictures** command helps you find and insert pictures from a variety of online sources.

To insert an online picture, follow the steps given below:

1 Click on the Online Pictures command in the Illustrations group.

A The Insert Pictures dialog box appears.

2 Type the keyword in the Bing Image Search box and press the Enter key.

3 Select the picture(s) you want to insert and click on the Insert button. The picture is downloaded and inserted in the document.
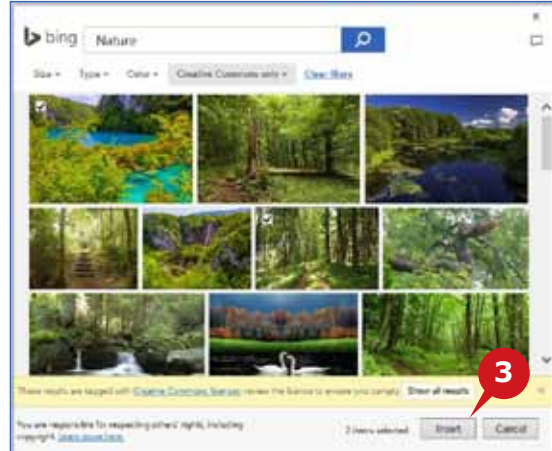

INSERTING SHAPES

The **Shapes** command is used to insert ready-made shapes into your document. Available shapes include Rectangles, Basic Shapes, Block Arrows, Equation Shapes, Flow chart, Stars and Banners, Callouts, etc.

To insert Shapes, follow the steps given below:

1 Click the Shapes command in the Illustrations group to display the Shapes gallery.

2 Select the Shape you want and drag the mouse to create a shape of the size you wish.

**A** A new contextual Format tab appears that contains various options to enhance the appearance of the shape.
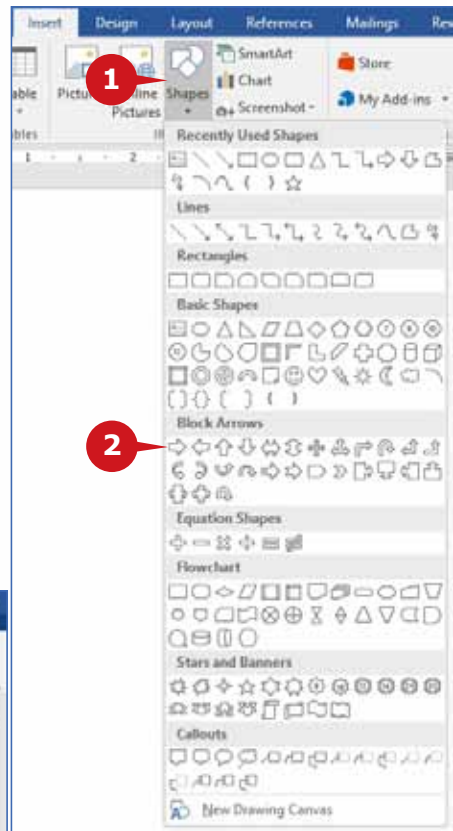
ROTATING AND RESIZING SHAPES

Shapes can be adjusted after they are drawn. You can change the orientation of a shape using the **rotation handle** at the top. Place the mouse pointer on it and drag to the left or right to rotate your shape.

To adjust the size of the shape, follow the steps given below:

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1 Select the shape you want to resize.

2 On the contextual Format tab, in the Size group, click the arrows or type new dimensions in the Height and Width boxes.
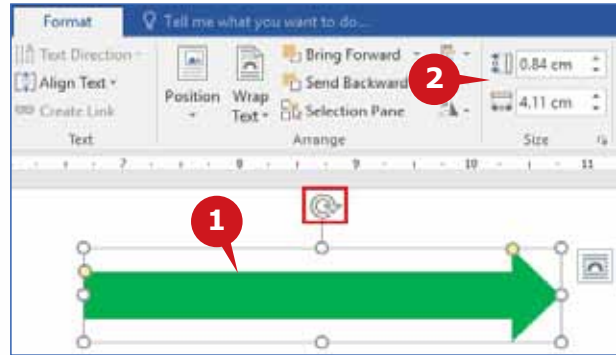
INSERTING A SMARTART

SmartArt graphics are visual representations of information that communicate your messages or ideas quickly and effectively. The **SmartArt** command enables you to insert a SmartArt graphic to visually communicate information. SmartArt graphics range from graphical lists and process diagrams to more complex graphics, such as Venn diagrams and organization charts.
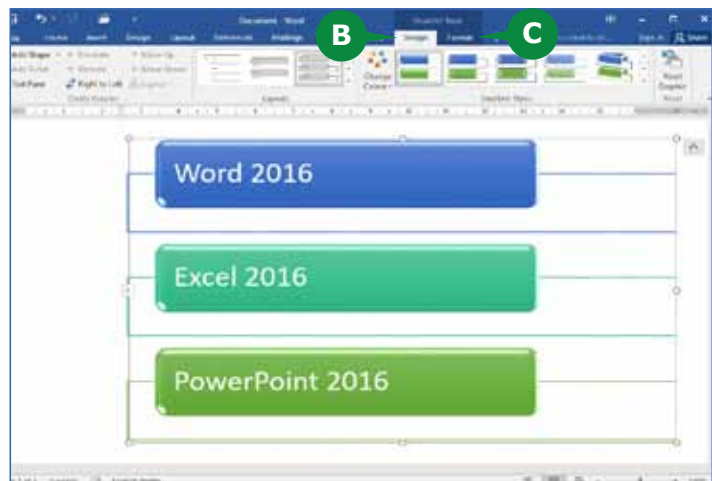
To insert SmartArt, follow the steps given below:

1 Click on the SmartArt command in the Illustrations group.

A The SmartArt dialogue box appears.

2 In the left pane, select the option you want.

3 In the right pane, select the required SmartArt.

4 Click the OK button.
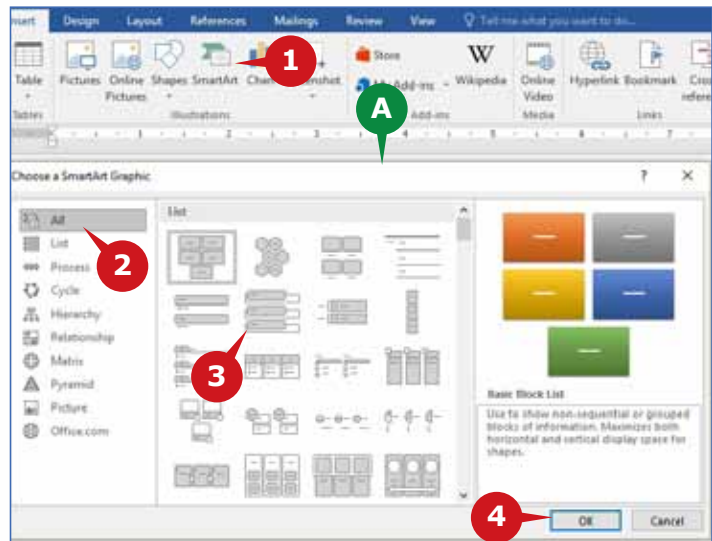
Two new contextual tabs named **Design** and **Format** are displayed.

B The Design tab helps you to change the layout, style, or colors used in your SmartArt graphic.

**C** The Format tab helps you change the shapes in your SmartArt graphic, their style, and their colors.

INSERTING CHART

A chart is a visual representation of data and conveys information in an easy to understand and attractive manner. The chart makes it easy to spot patterns and trends in your data. Several types of charts like bar chart, column chart, pie chart, line chart etc. are available in Word 2016.

To insert a Chart, follow the steps given below:

1 Click on the Chart command in the Illustrations group.

A The Insert Chart dialogue box appears.

2 In the Insert Chart dialog box, select the type of chart that you want.

3 Click the OK button.

B The Excel 2016 sheet appears.

4 Edit the data in Excel 2016. After you finish editing your data, close the Excel.

C The desired chart is inserted in the document.


Student Grades
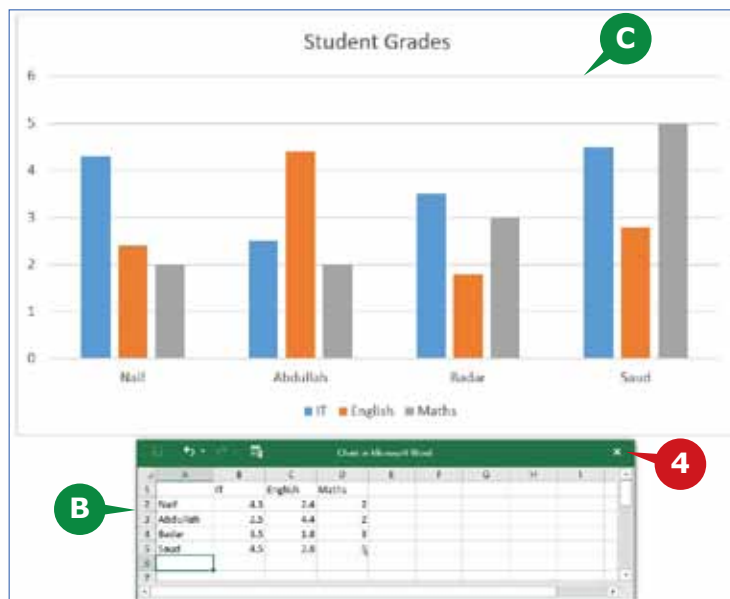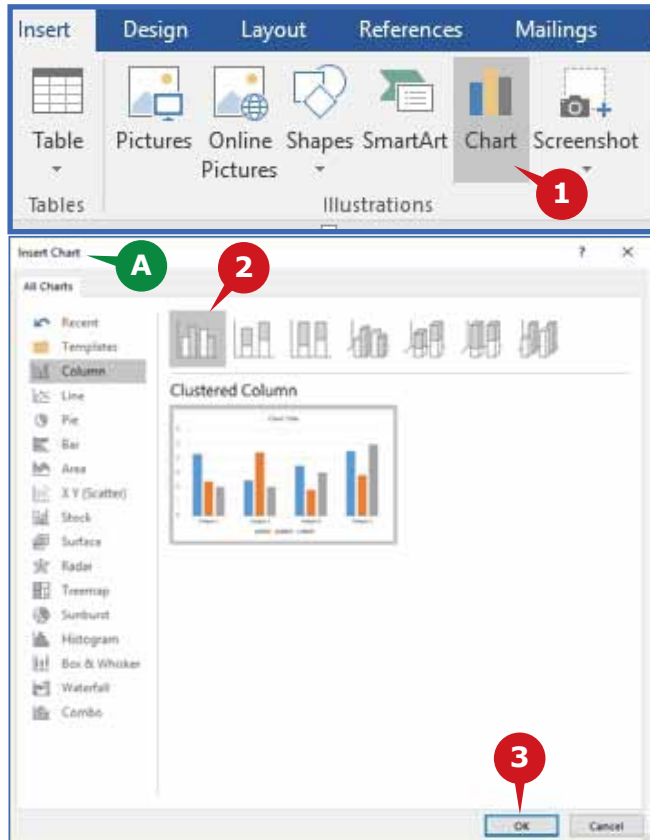
LINKS GROUP

The Links group consists of commands that enable you to create bookmarks, links and cross references. These commands help you to jump to other places in the same document or to open another document or a website.

INSERTING BOOKMARK

Suppose you are working on a long document and need to move to specific locations in the document. For this, you can use the **Bookmarks**. It enables you to quickly jump to the marked locations within the document instead of scrolling through many pages of your document.

To insert a Bookmark, follow the steps given below:

1 Select the location where you would like to insert the bookmark.

2 Click the Bookmark command from the Links group.

A The Bookmark dialog appears.

3 In the Bookmark name box, type a name for your bookmark.

4 Click the Add button.

5 To reach the bookmark location, open the Bookmark dialog box from the Insert Tab, select the name of the bookmark, and then click Go To.
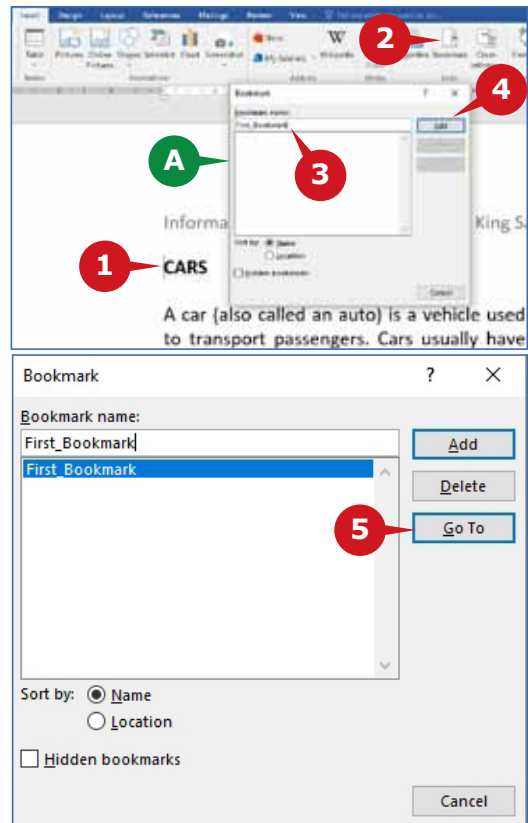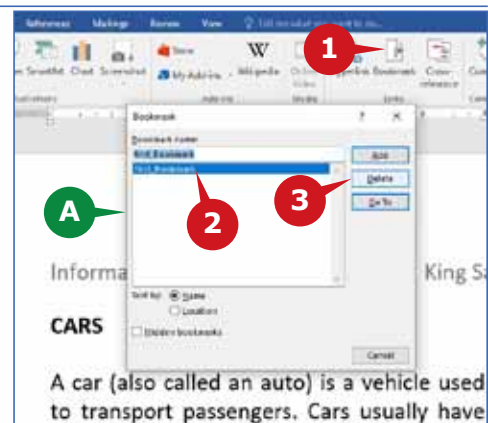
TIP

The Bookmark name must start with a letter and cannot contain spaces.

DELETING A BOOKMARK

To delete the bookmark, follow the steps given below:

1 Click the Bookmark command from the Links group.

A The Bookmark dialog appears.

2 Select the bookmark that you wish to delete.

3 Click on the Delete button.

INSERTING HYPERLINK

Hyperlinking is a process to create a link in your document for quick access to webpages and files. Hyperlinks can also take you to the marked places in your document, such as headings and bookmarks.

To insert a hyperlink, follow the steps given below:

1 Select the text to which a link has to be created.

2 Click the Hyperlink command from the Links group. The Insert Hyperlink dialog box appears.

A If the link has to be created for a webpage, then click the first option (Existing file or webpage) in the Link to pane on the left. Type the URL of the web page in the Address text box.

B If the link has to be created for an existing file, then click the first option (Existing file or webpage) in Link to list and browse the file in right panel.

C If the link has to be created for any place in the same document, then click the second option (Place in this document) in Link to list and browse the bookmark of that specific place in right panel.
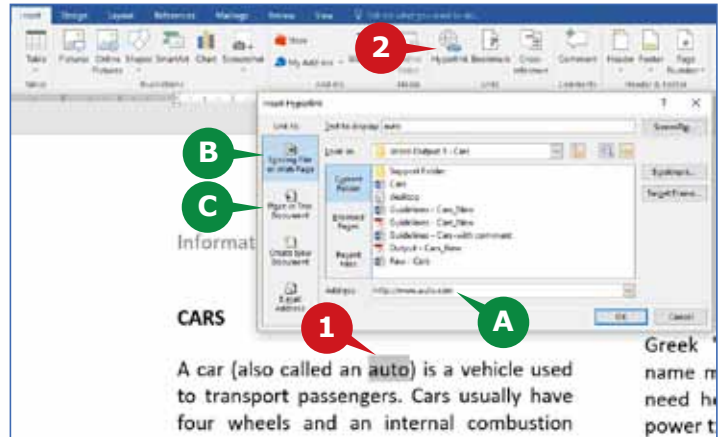
The color of hyperlinked text gets changed to blue with underlined. To open the link, place the mouse pointer over the hyperlinked text, keep the **CTRL** key pressed, and then click the mouse.

REMOVING HYPERLINK

You can also remove the hyperlink from the text.

To remove the hyperlink, follow the steps given below:

1 Select the hyperlinked text.

2 Click the Hyperlink command in the Links group.

A The Edit Hyperlink dialog box appears.

3 Click on the Remove Link button in the dialog box.
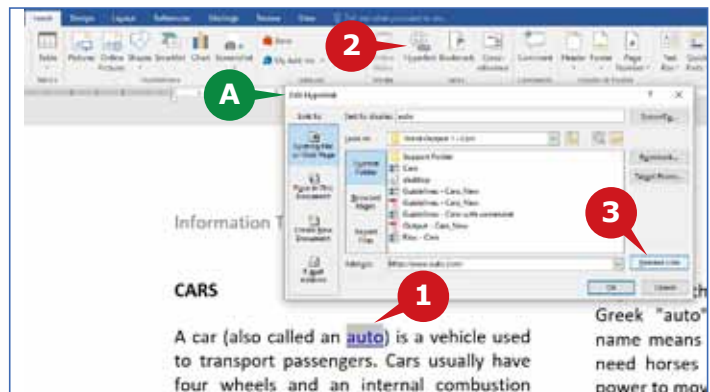
TIP

*Right-click on the Hyperlinked text and select **Remove Hyperlink.***

HEADER & FOOTER GROUP

The commands in the Header and Footer group enable you to add contents at the top and bottom of all pages in the document. This group consists of: **Header**, **Footer** and **Page Number**.
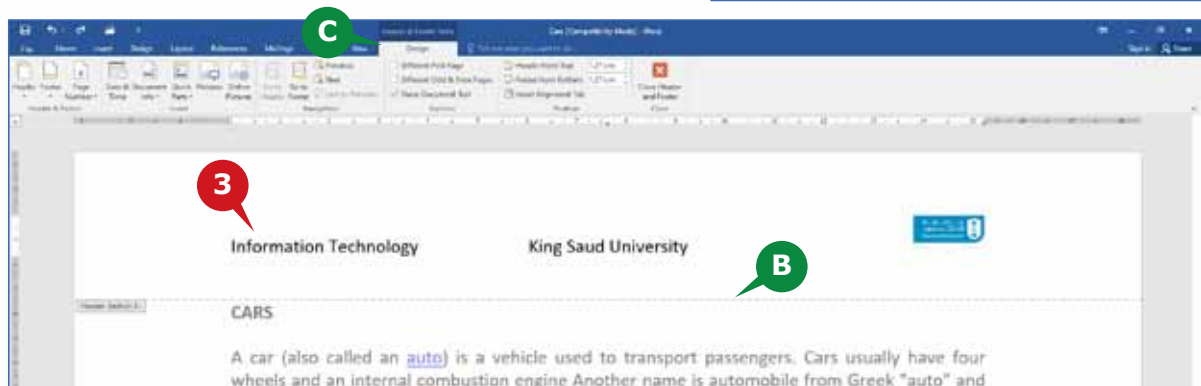
ADDING HEADER OR FOOTER TO A DOCUMENT

The text, symbol, picture, page no., etc. that appears on top of every page of the document, is called a **Header**. For example, Name of the company, Topic of the document, etc. is the header for each page.

In the same way, the text, symbol, picture, page no., etc. that appears in the bottom of every page of a document is called a **Footer**.

To add the Header, follow the steps given below:

1 Click on the Header command in the Header & Footer group.

A A list of header styles is displayed.

2 Choose the suitable header style.

B The header area becomes active .

C A new contextual Design tab is displayed with various options for header and footer.

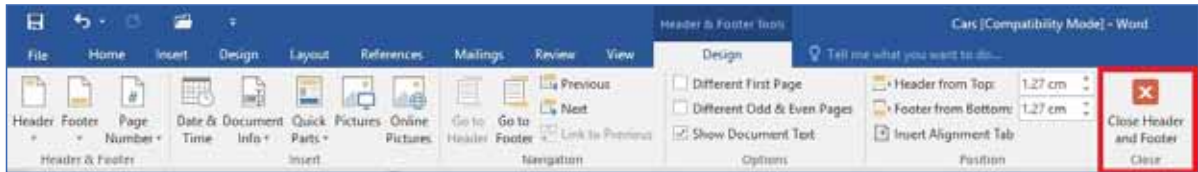**3** Enter the text in the header area.

To insert a Footer, click on the **Footer** command from the **Header & Footer** group in the similar way.
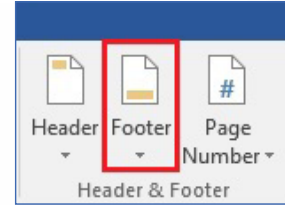
Close Header & Footer option

After adding a header or footer to the document, you can close the header and footer option from the contextual **Design** tab, by clicking on **Close Header and Footer** button.

INSERTING PAGE NUMBER

The **Page Number** command is used to insert the page number on every page of your document at a position of your choice.

To add the page number, follow the steps given below:

1 Click on the Page Number command in the Header & Footer group.

A A list of Page Number options appear.

2 Click on the desired option from the list.

3 Click on a suitable style.

B The page number gets inserted.
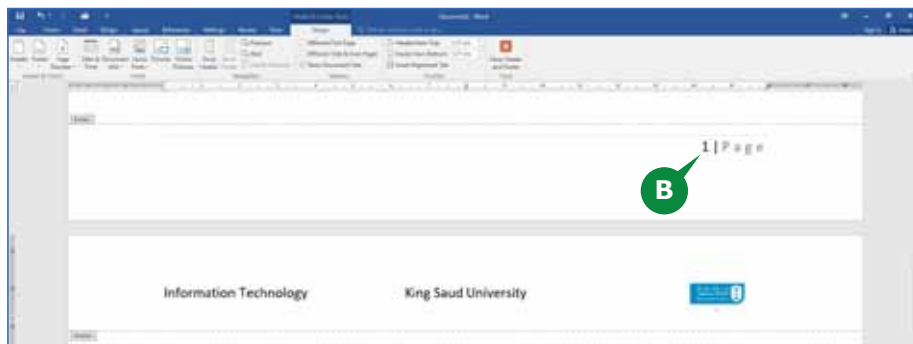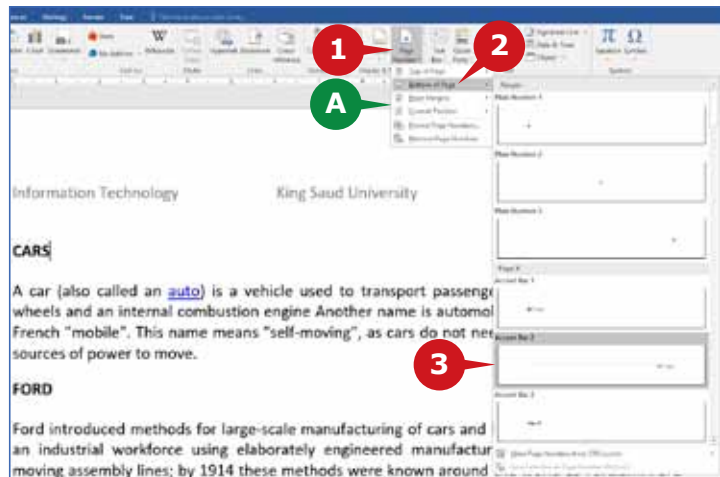
ACTIVITIES

Activity   1

Choose the correct option for the following statements.

1. The contextual _____ contains various tools to modify the appearance of selected picture.

   a. Design tab

   b. Format tab

   c. Layout tab

   d. Tools tab

2. The _____ command allows you to insert an image from a variety of online sources.

   a. Online Pictures

   b. Store Pictures

   c. Quick Pictures

   d. Picture Sources

3. The_____ command is used to move directly to specific word or location in a document.

   a. Comment

   b. Bookmark

   c. Cross-references

   d. Outlines

4. The Header is located at the _____ of the document.

   a. Left

   b. Right

   c. Bottom

   d. Top

Activity 2

Fill in the blanks with the appropriate words provided in the box.

| SmartArt	Wrap Text	Hyperlink	Picture Styles	Artistic Effect

1. You can apply _____ to make the picture look more like a sketch or painting.

2. The _____ command allows you to place text behind an image, in front of an image or around an image.

3. The _____ helps you to visually communicate information using graphics.

4. Adding _____ to text or image can provide access to webpages and files directly from your document.

Activity 3

Practice the following tasks on your computer.

1. Create a new blank document. Type the text "google search engine" and link the text to google website.

2. Insert a picture from online pictures. Crop the picture and set the picture position to "Middle Center ". (**Hint:** You can search "car".)

3. Create your daily routine cycle (**Hint:** You can use the "Text Cycle" SmartArt.)

4. Insert your name and section number in the Header, and page number at the bottom left of the document. (**Hint:** You can align name in the right, and section number in the left of header.)
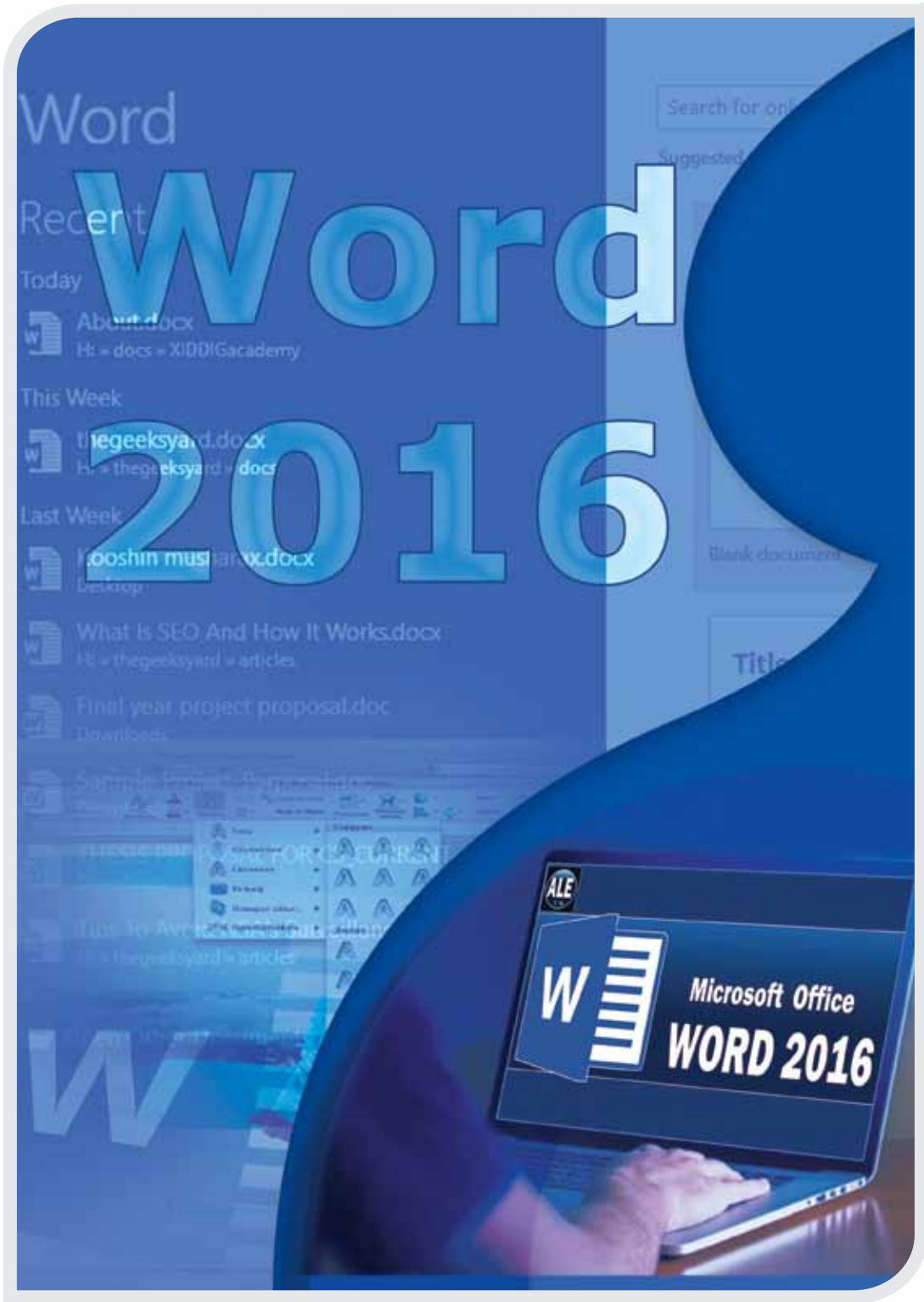
Session 11

THE INSERT, DESIGN & THE LAYOUT TABS

OBJECTIVES

General Objectives

In this Session, you will learn about the **Text** group and the **Symbols** group of the **Insert** Tab, **Page Background** group of the **Design** Tab, and **Page Setup** group of the Layout Tab.

Specific Objectives

At the end of this Session, you should be able to understand and Practice:

- **The Insert Tab**
  - The Text Group And The Symbols Group

- **The Design Tab**
  - Page Background Group

- **The Layout Tab**
  - Page Setup Group

LEARNING

THE INSERT TAB

In the previous sessions, you have learnt about some groups in the Insert Tab. This tab has a lot of useful commands that enable you to insert tables, pictures, shapes, SmartArt graphics, charts, etc. In the following section, you will learn about some more commands available in the Text and Symbols groups.

THE TEXT GROUP AND THE SYMBOLS GROUP

The Text group commands enable you to present text in different ways and insert embedded objects. The Symbols group commands enable you to insert equations and symbols.
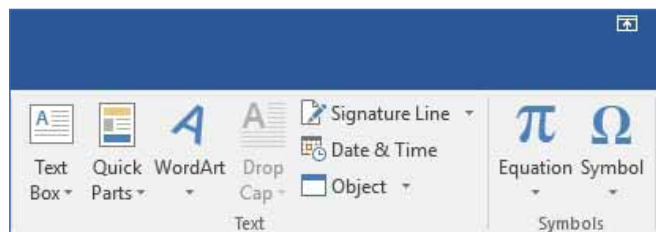
INSERTING TEXTBOX

A Text Box enables you to add text anywhere in your document. It is great for showcasing important text, such as headings or quotes.

To insert a Text Box, follow the steps given below:

1 Click on the Text Box command in the Text group.

A A list of various text boxes appears.

2 Choose the required style of text box.

**B** The Text Box is inserted and you can edit the text.
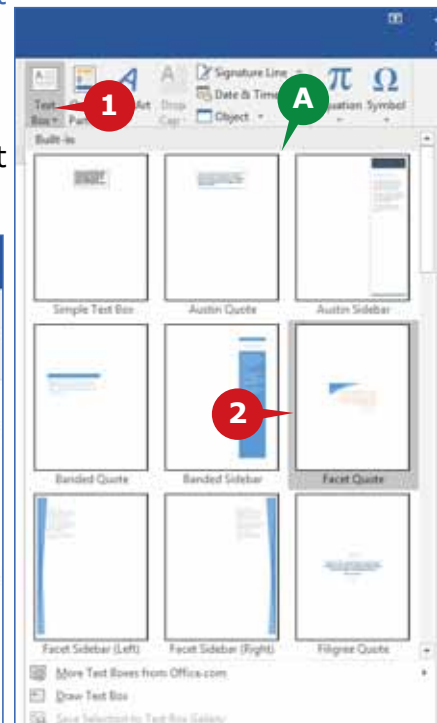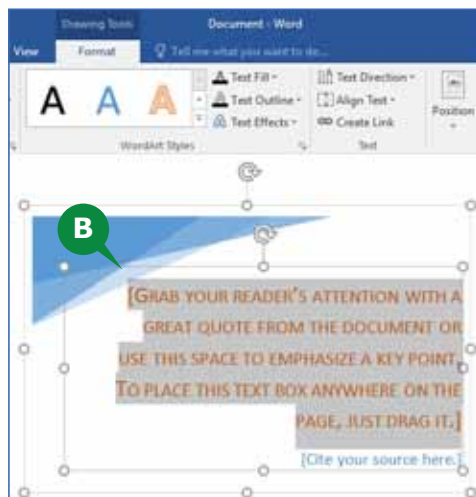
USING WORDART

The WordArt command is used to insert decorative text in the document.

To insert WordArt, follow the steps given below:

1 Click on the WordArt command in the Text group.

A The WordArt gallery having various decorative texts appears.

2 Choose the required WordArt from the gallery.

B This inserts a text box in the document with the same decorative format. Here, you can write the desired text.
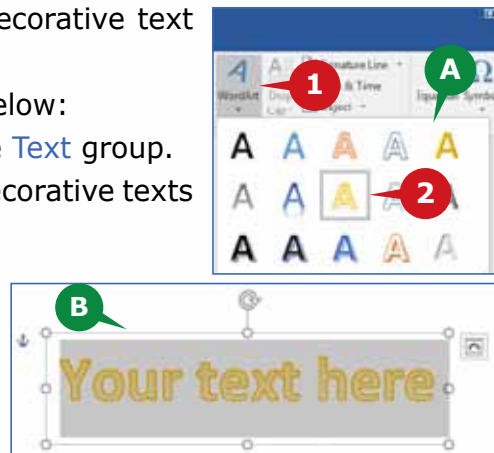
## APPLYING DROP CAP EFFECT

You might have noticed a bigger letter in the beginning of a paragraph in Newspapers, Flyers, etc. This is done to create interest and is called a Drop Cap effect. The Drop Cap command is used to apply the effect.

To insert the Drop Cap effect to a paragraph, follow the steps given below:

1 Click anywhere in the paragraph.

2 Click on the Drop Cap command from the Text group.

A A list appears with various Drop Cap options.

3 Select the desired Drop Cap option from the list.

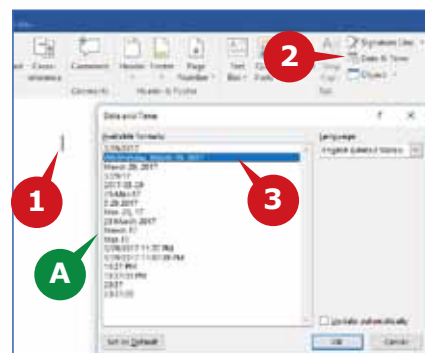**B** The selected Drop Cap effect is applied to the paragraph.
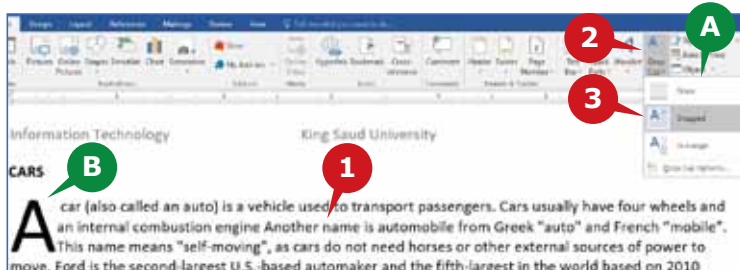
INSERT DATE & TIME

The **Date & Time** command is used to quickly add the current date or time to your document.

To insert the Date & Time, follow the steps given below:

1 Click in the document where you want to insert Date & Time.

2 Click on the Date & Time command in the Text group.

A The Date & Time dialog box appears.

**3** Choose the desired Date & Time format from the list and Click on OK button.

INSERTING SYMBOLS

There are several special symbols such as Mathematical operators, Currency, and other symbols that you may need to insert in a document. You can insert these symbols from the Symbol command in the Symbols group. You can also insert symbols that are not available on the keyboard such as ©, ®, ¥.

To insert a symbol, follow the steps given below:

1 Click in the document where you want to insert the symbol.

2 Click on the Symbol command in the Symbols group.

A A list displaying several symbols appear.

3 Click on the desired symbol to insert it into your document.
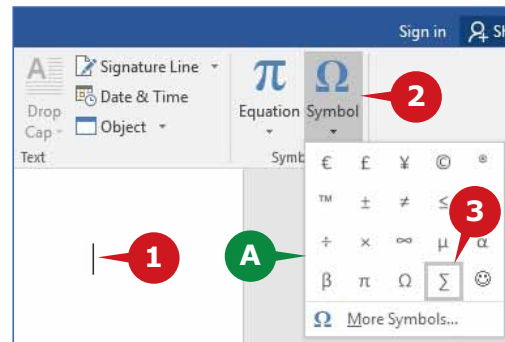
THE DESIGN TAB

The next tab after the Insert tab is the Design tab. This tab consists of commands that enable you to quickly apply different formatting styles to your document. You can even set colors and insert pictures in the background of a document.

PAGE BACKGROUND GROUP

The commands in this group enable you to add a Watermark, change the Page Color or add a Page Border. Watermark and Page Color apply to the entire document, while you can change Page Borders by section.
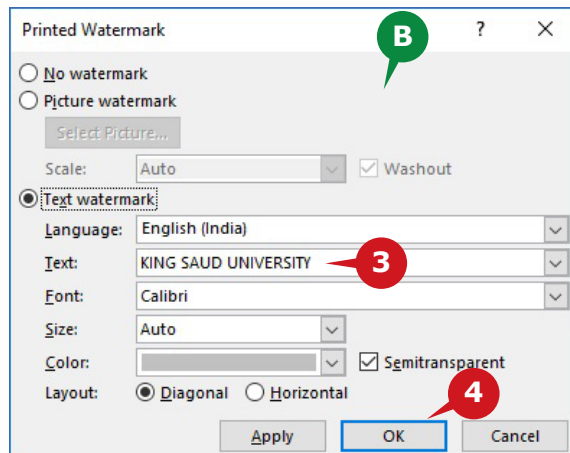
ADDING WATERMARK

The Watermark command enables you to add see-through text, such as "**Confidential**" or "**Urgent**" behind the content on the page. The faint watermark is a great way to show that the document requires special treatment without distracting from the content.

To insert a Watermark, follow the steps given below:

1 Click on the Watermark command in the Page Background group.

A A list appears containing many samples along with Custom Watermark option.

2 Click the Custom Watermark option.

B A dialog box appears that helps to insert picture watermark or text watermark with several options.

3 Select the Text Watermark and type the desired text in the box.

4 Click Apply followed by the OK button.

REMOVING WATERMARK

To remove watermark, follow the steps given below:

1 Click on the Watermark command in the Page Background group.

**2** Click on the Remove Watermark option in the drop-down list.

APPLYING PAGE COLOR

The Page Color command adds a splash of color to your document by changing the background color of the page. You can select the desired color from the color palette and apply it to all the pages of your document.

To apply a page color, follow the steps given below:

1 Click on the Page Color command in the Page Background group.

A A color palette containing various colors appears.

2 Select the desired page color.

B The page color is changed.

C The Page Color palette also has an option Fill Effects, which opens a dialog box having four tabs as Gradient, Texture, Pattern and Picture. Using these tabs, you can change the background of your document to the selected fill effect.
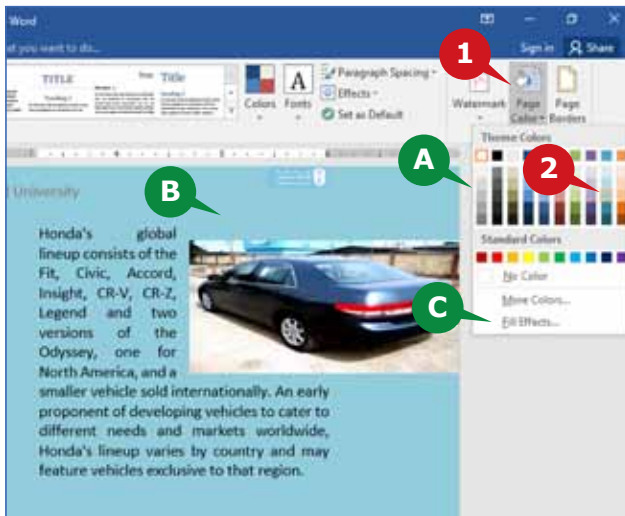
PAGE BORDERS

A border draws focus and adds a stylish touch to your document. The **Page Borders** command applies borders to selected or all pages of the document.

To apply the Page Border, follow the steps given below:

1 Click on the Page Borders command in the Page Background group.

A A dialog box containing options such as style, width, color, etc., appears.

2 Select the desired border style, width, color, etc.

3 Click on OK button.
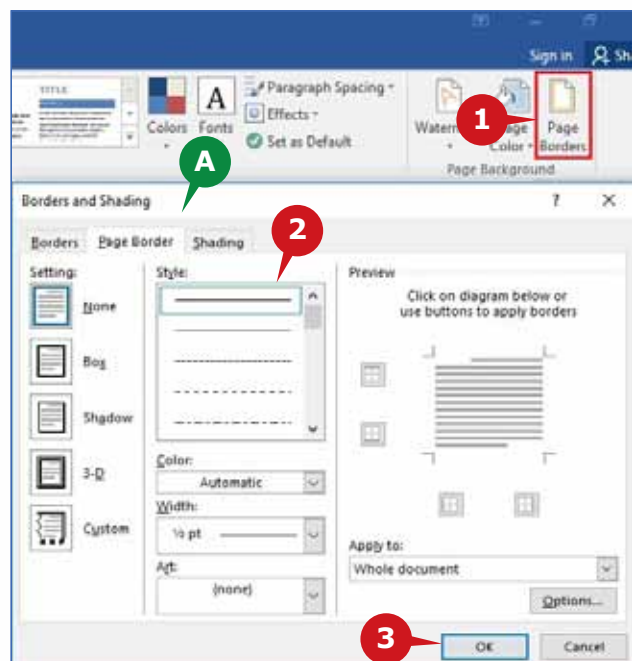
THE LAYOUT TAB

The Layout tab allows you to customize the way your document's page is set up. It helps you to change the document orientation, page size, margins, indentation, line spacing, and paragraph settings. It is better to adjust the Page settings before you start creating a document.

PAGE SETUP GROUP

The Page Setup group contains the commands like margins, page size, orientation, line numbers, etc., that enable you to modify the structure of your document.

MARGINS

Margins are the blank areas of space around the edge of your document. The **Margins** command is used to set the margin sizes for the entire document or to a section. There are four margins: **left, right, top,** and **bottom. Gutter** is a special margin used for binding purpose.

To set the page Margins, follow the steps given below:

1 Click on the Margins command in the Page Setup group.

A A list appears containing pre-defined margins and custom margin options.

2 Click the Custom Margins to set the margins manually.

B A dialog box appears where you can set the margins.

3 Change the values for each margin as desired.

4 Click on OK button.
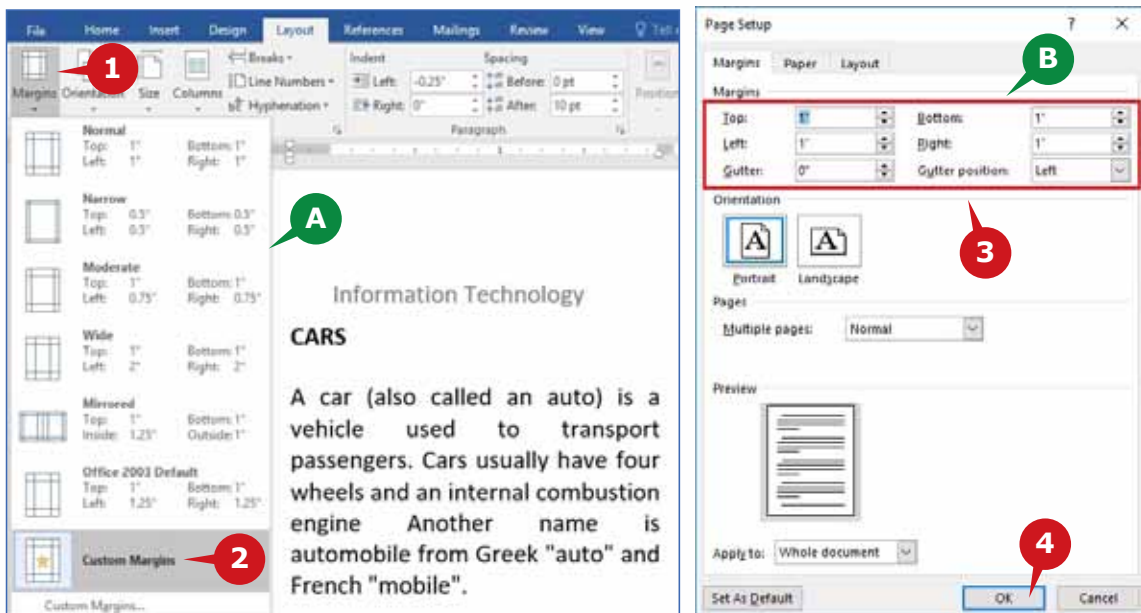
ORIENTATION

Orientation is the direction of a page in the document. The **Orientation** command is used to give your pages a **Portrait** or a **Landscape** layout. By default, Word 2016 provides Portrait orientation.

To set the Orientation of a page, follow the steps given below:

1 Click on the Orientation command from the Page Setup group.

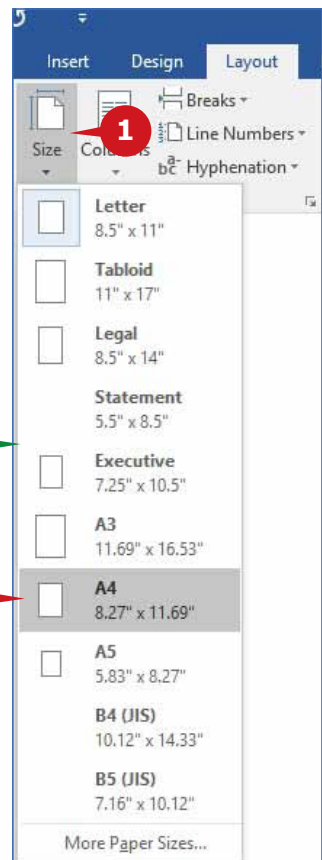2 Select the desired orientation for your document.
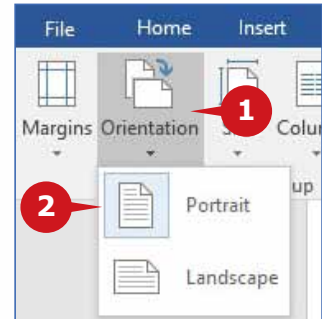
SIZE

The **Size** command is used to choose a paper size for your document. The paper sizes may be A4, A3, A5, Letter, Legal, etc.

To change the paper size, follow the steps given below:

1 Click on the Size command from the Page Setup group.

A A list appears displaying the available paper sizes.

2 Choose the desired paper size.

COLUMNS

You can divide the text in your document into columns. You can also choose the width and spacing of the columns, or use one of the pre-set formats. The **Columns** command is used to split your text into two or more columns.

To split your text into columns, follow the steps given below:

1. **Select** the text that you want to convert into columns.
2. Click on the **Columns** command from the **Page Setup** group.
3. **Choose** the desired number of columns for your text.
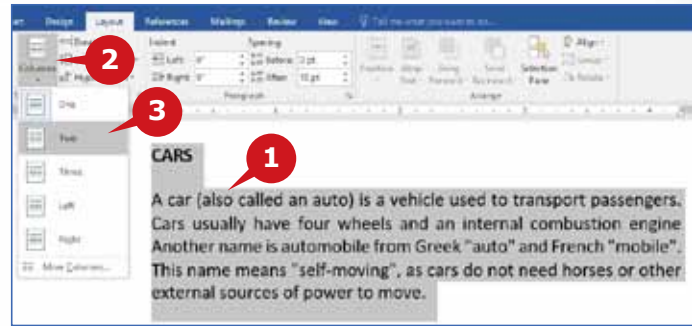
LINE NUMBERS

Word 2016 automatically counts the lines in a document and can display the appropriate number beside each line of text. Viewing the line numbers is sometimes very useful when you want to refer to a specific line in a document. You can choose to display the line numbers in all or part of the document.
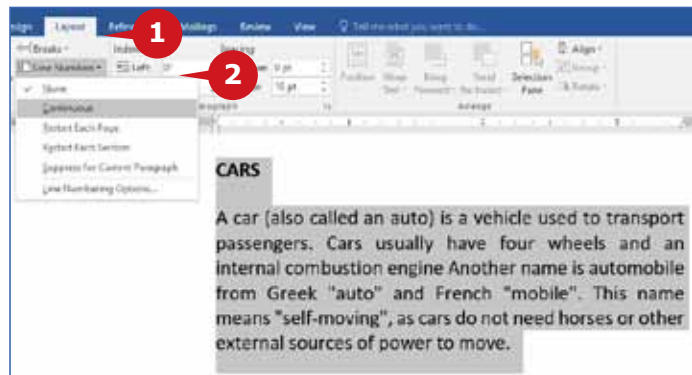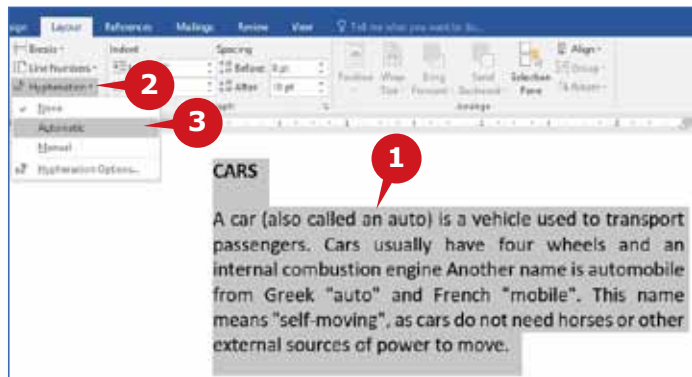
To insert the Line Numbers, follow the steps given below:

1. Click on the **Line numbers** command in the **Page Setup** group.
2. **Choose** the desired option from the list.

HYPHENATION

The **Hyphenation** feature is used to split long words at the end of a line. A hyphen is a symbol like "-", which is inserted when a word appears at the end of a line and it does not fit in the end. Just like you see in books or magazines, hyphenating helps you to create more uniform spacing, and saves space in your document. The **Hyphenation** command in the **Page Setup** group inserts hyphens to eliminate gaps in justified text or to maintain even line lengths in narrow columns.

To enable the hyphenation feature, follow the steps given below:

1. **Select** the paragraph.
2. Click on the **Hyphenation** command in the **Page Setup** group.
3. **Choose** the desired option from the list.

Session 11

ACTIVITIES

Activity **1**

Choose the correct option for the following statements.

1. The_____ command enables you to add a block of text with different styles anywhere in your document.
    a. Drop Cap
    b. Symbol
    c. Workbox
    d. Textbox

2. A_____is a large capital letter at the beginning of a paragraph that has the size of two or more lines of regular text.
    a. Increase Font Size
    b. Word Art
    c. Drop Cap
    d. Superscript

3. _____ is a see-through text or picture that appears behind the contents in your document.
    a. Word Art
    b. Drop Cap
    c. Textbox
    d. Watermark

4. _____ is a special margin used to add extra space for book binding.
    a. Header and Footer
    b. Gutter
    c. Orientation
    d. Custom margin

Activity 2

Fill in the blanks with the appropriate words provided in the box.

| Symbol	Page Color	WordArt	Hyphenation	Drop Cap

1. The _____ command is used to add decorative text in the document.

2. The _____ command enables you to insert signs or special characters in your document.

3. The _____ command is used to add color or fill effect to the background of your document.

4. The _____ command is used to split long words at the end of a line to eliminate gaps in the justified text.

Activity 3

Practice the following tasks on your computer.

1. Create a blank document. Insert the "Facet Quote" textbox and type the text "King Saud University".

2. Insert random sample text in the document by using **"=rand()"** function. Change the orientation of the document to "Landscape" and apply a page border with 6pt width.

3. Set the Top and Bottom margins to 2 inches, Left margin to 1.5 inches, and Right margin to 1 inch.

4. Add the Watermark with the text "King Saud University" and set the Page color to the texture effect "Denim" in the document.
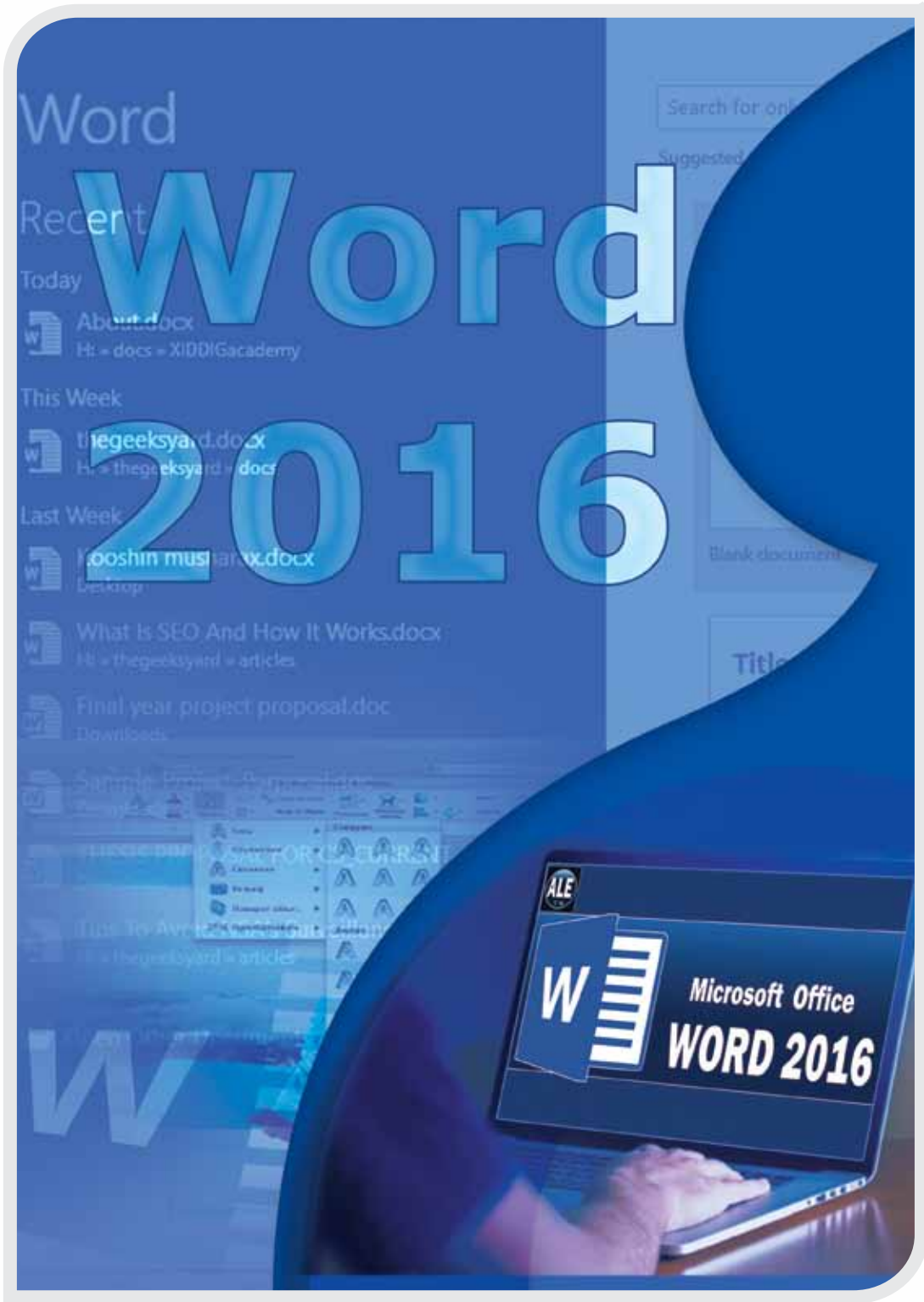
Session 12

THE REFERENCES TAB & THE REVIEW TAB

OBJECTIVES

General Objectives

In this Session, you will learn about the **Table of Contents** and **Footnotes** groups of **References** Tab and **Proofing** and **Comments** groups of **Review** Tab.

Specific Objectives

At the end of this Session, you should be able to understand and Practice:

- **The References Tab**
  - Table of Contents Group
  - Footnotes Group

- **The Review Tab**
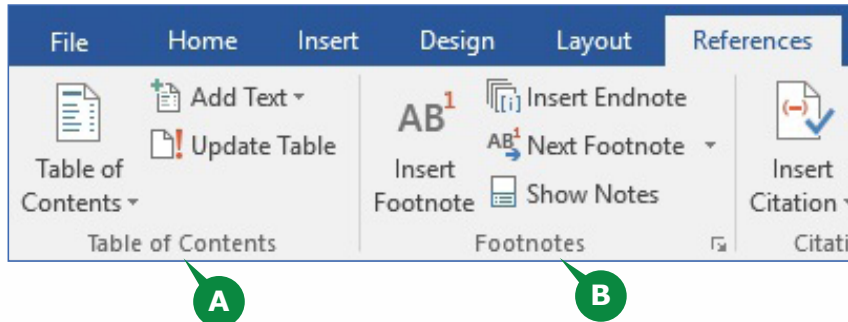 - Proofing Group
  - Comments Group

LEARNING

THE REFERENCES TAB

The References Tab commands help researchers & professionals in creating references in the document. In this section, you will learn about the following groups of the References tab.

A Table of Contents Group
B Footnotes Group

TABLE OF CONTENTS GROUP

This group enables you to create table of contents in your documents. It has commands such as Table of Contents, Add Text, Update Table.
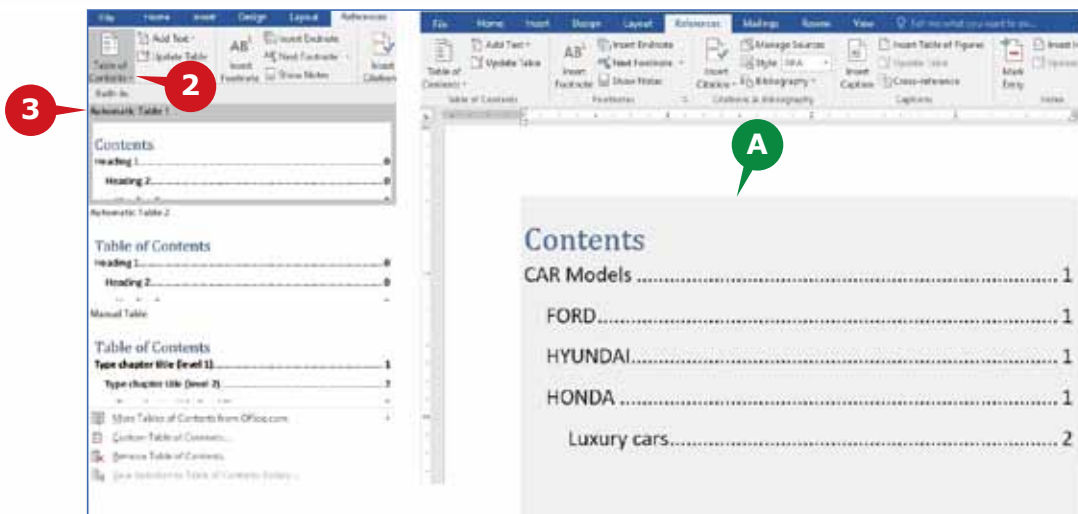
INSERTING TABLE OF CONTENTS

A Table of Contents displays the topics of the entire document in a list format and facilitates easy location of topics. This provides a structured and a hierarchical view of contents.

To Insert a **Table of Contents,** follow the steps given below:

1 Select the Titles in the document and apply the appropriate Heading Styles from Styles group of Home tab.

2 Place the cursor in the document where you want to insert the Table of Contents and Click on the Table of Contents command.

3 Choose the Automatic Table1 from the drop down list.

**A** A Table of Contents for the whole document is inserted in the specified page.

UPDATING TABLE OF CONTENTS

While working on a document, the number of pages and its contents keep on changing and accordingly you need to update your Table of Contents. The **Update Table** command, available in the **Table of Contents** group, helps you to update the table if there are any changes in the **titles** or **page numbers**.

To **Update** the Table of Contents, follow the steps given below:

1 Click on the Update Table command from the Table of Contents group.

2 Select the Update entire table option from the dialog box.

3 Click OK button

**A** The Table of Contents is updated.
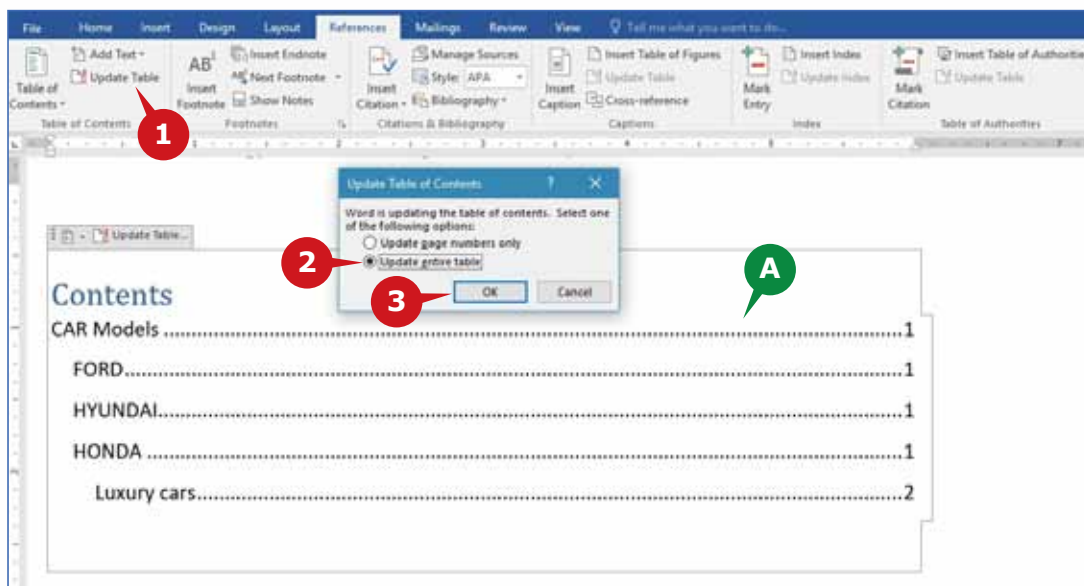
DELETING TABLE OF CONTENTS

A Table of Contents can be deleted from the document, when you don't need it or want to create a manual table of contents instead of an automatic table.

To Remove Table of Contents, follow the steps given below:

1 Click on the arrow of Table of Contents command.

2 Choose the Remove Table of Contents option from the drop down list.
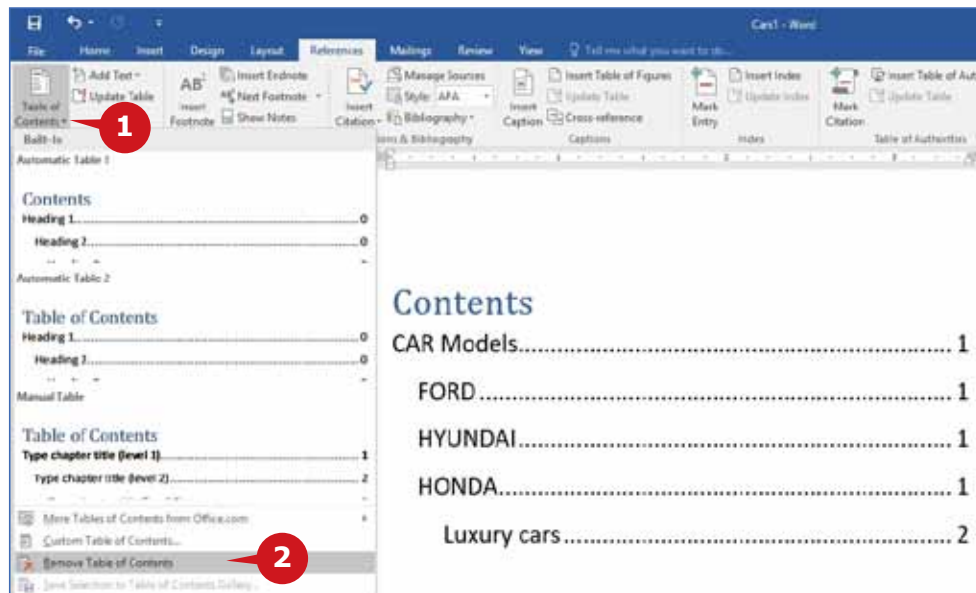

FOOTNOTES GROUP

The Footnotes group helps you to insert additional notes about words/phrases either at the end of each page or at the end of the document.

INSERTING AND DELETING FOOTNOTES

Footnote is a way of citing source of references within the text in a document and it appears at the bottom of a page. It helps to present the information in context with its sources, allowing the reader to judge the precision of the information.

To Insert a **Footnote,** follow the steps given below:

1 Select the Text on which you want to insert the footnote.

2 Click the Insert Footnote command from the Footnotes group.

A A superscripted number appears on the text, and you're instantly taken to the bottom of the page.
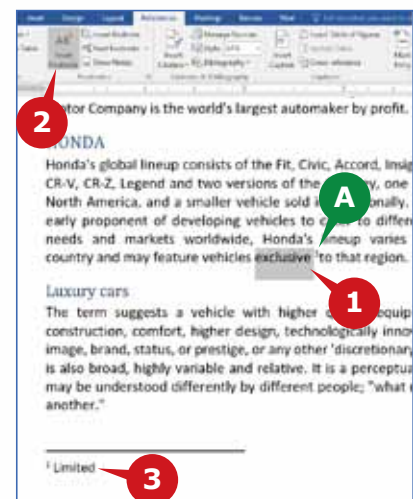
3 Write the appropriate notes in the reference mark at the bottom of the page.

To delete a **Footnote,**

4 Select the superscripted reference number on the text and press the DELETE key from the keyboard.

THE REVIEW TAB

The Review tab has some significant commands to make your document free of errors. For instance, you can use it for proofing your document, adding or removing comments, etc.

This tab helps you to check Spelling & Grammar mistakes, Count Words, Translate, and change Language in documents.

PROOFING GROUP

The **Proofing** group allows you to make your document look perfect and professional. It has commands such as, Spelling & Grammar, Thesaurus, Word Count.

SPELLING AND GRAMMAR

The **Spelling & Grammar** command is used to check and remove spelling and grammar errors from a document. Word 2016 flags spelling and grammar errors as below:
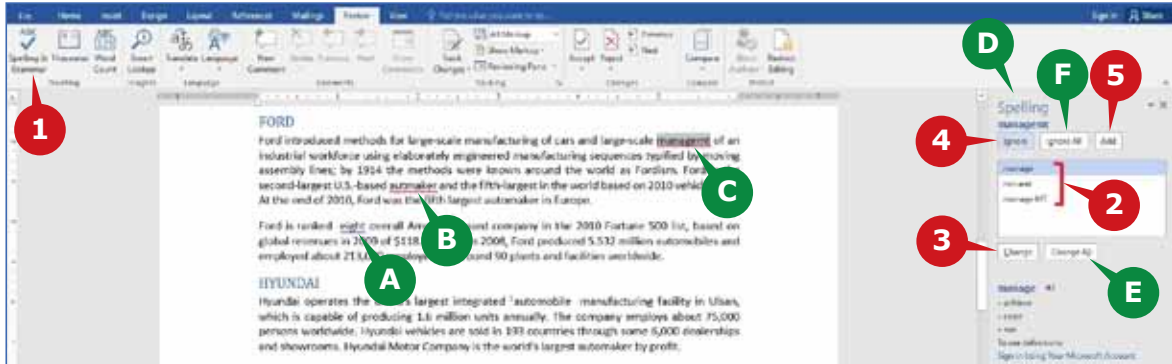
A Blue Wavy Underline: This is flagged to show grammar errors, formatting inconsistencies or contextual errors.

B Red Wavy Underline: This is flagged to show the spelling errors.

To check the **Spelling & Grammar** of your document, follow the steps given below:

1 Click on the Spelling & Grammar command from the Proofing group.

C Word 2016 selects the first error in the document.

D The Spelling Pane appears on the right side of the document.

2 Select the suitable word from the suggestion list.

3 Click on the Change button to replace the text with the selected text from the suggestion list.

E Use the Change All button to replace all the occurrences in the whole document.

4 Click on the Ignore button to keep the word as it is in the document.

F Use the Ignore All button to keep it, as it is in the whole document if any.

5 Click on the Add button to add the selected word to the default dictionary, so that Word 2016 stops flagging it as misspelt.

Repeat the above steps to correct the spelling or grammar errors in the entire document.

Word displays a dialog box when it finishes checking for spelling and grammar mistakes, finally click the **OK** button.

COMMENTS GROUP

The commands in this group enable you to insert, delete and view comments. Word 2016 displays the comments in the Reviewing pane or in a balloon at the right margin of the document.

INSERTING COMMENTS

A comment is an additional note or an annotation for some text or phrase in the document that can be added by an author or a reviewer.

To insert a **Comment,** follow the steps given below:

1. Select the text on which you want to insert a Comment.
2. Click on the New Comment command from the Comments group.
3. Write the comment in the balloon that appears on the right side of the document.
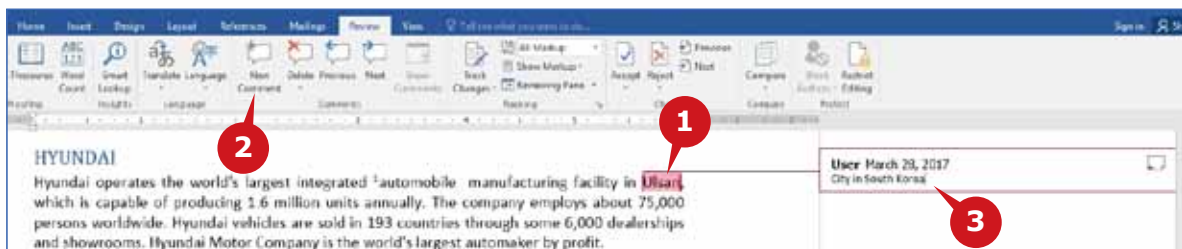
DELETING COMMENTS

The Delete comments command is used to delete the comments that are no longer required in the document.

To delete a comment, follow the steps given below:

1 Select the comment that you want to delete.
2 Click on the Delete command from the Comments group.
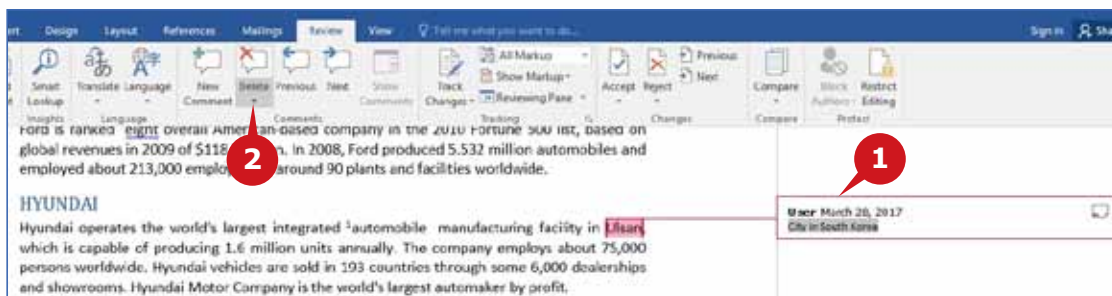
COMMENT NAVIGATION

You can use the **Previous** and **Next** commands available in the Comments group to navigate through the comments in the whole document.

To navigate through the comments, follow the steps given below:

1 Click on the Previous command to jump to the previous comment.

2 Click on the Next command to jump to the next Comment.

ACTIVITIES

Activity **1**

Choose the correct option for the following statements.

1. You can create a _____to display the headings of the document in a list format.

   a. Table of Contents

   b. Footnotes

   c. New comment

   d. Smart Lookup

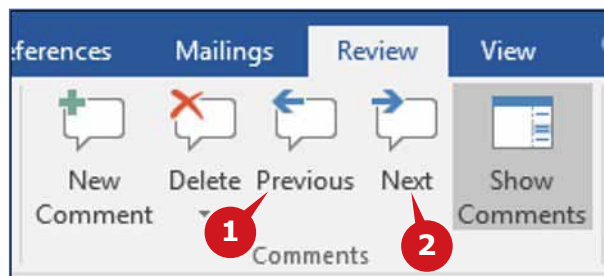2. _____ provide references or additional information for a particular text at the bottom of the page.

   a. Comments

   b. Footnotes

   c. Table of Contents

   d. Cover Page

3. The _____command is used to check and remove errors from the document.

   a. Cross-reference

   b. Spelling & Grammar

   c. Check & Review

   d. None of the above

4. _____ appears as a balloon on the right side of the document.

   a. Comment

   b. Footnote

   c. Table of Contents

   d. Spelling & Grammar

Activity 2

Fill in the blanks with the appropriate words provided in the box.

Proofing	Footnote	Red Wavy	Heading Styles	Comments

1. You need appropriate _____ to insert a Table of Contents.

2. The Spelling & Grammar command is located in the _____ group of the Review tab.

3. A_____ is marked as a superscripted number to the referenced text.

4. To represent spelling error, a _____ line appears under the word.

Activity 3

Practice the following tasks on your computer.

1. Create a blank document. Insert random paragraphs by using **"=rand()"** function. Enter the text "Sampule cantant" before the second paragraph and apply Heading 1 style.

2. Add the footnote "Spelling mistake" to the text "Sampule cantant".

3. Check and correct the spelling and grammar mistakes in the document.

4. Remove the footnote from the document.
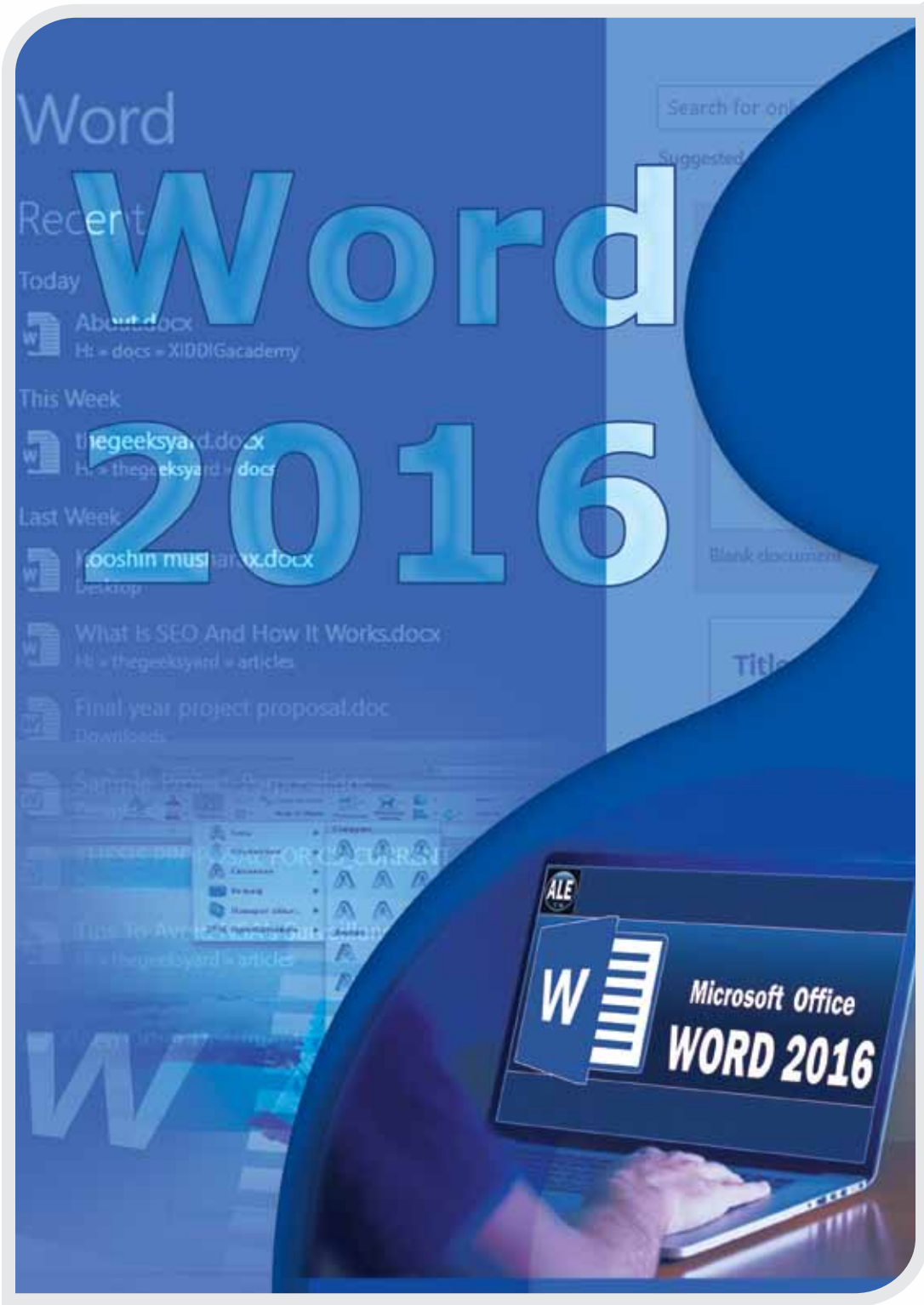
| Session 13 | THE VIEW TAB & OTHER FEATURES OF WORD 2016 |

OBJECTIVES

General Objectives

In this Session, you will learn about the **View Tab** and **Other Features of Word 2016.**

Specific Objectives

At the end of this Session, you should be able to understand and Practice:

- **The View Tab**
  - Views Group
  - Show Group

- **Other Features of Word 2016**
  - Using PDF Format
  - Creating a Template

LEARNING
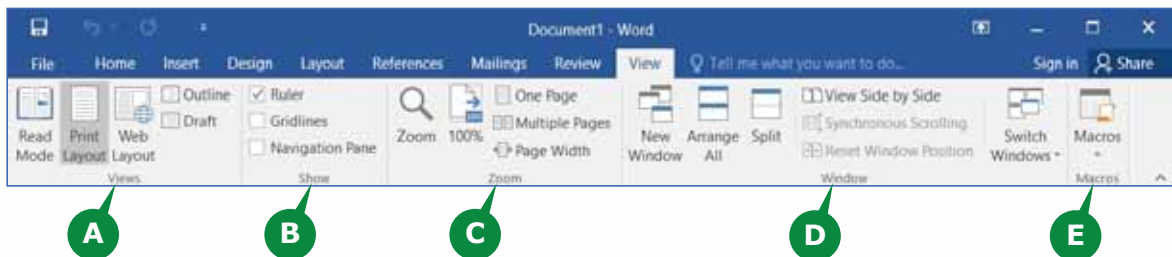
THE VIEW TAB

The View tab contain commands that help you to change the view of your document, adjust zoom level, show or hide user interface elements, and to arrange or work with multiple document windows. It has the following groups:

- **A** Views Group
- **B** Show Group
- **C** Zoom Group
- **D** Window Group
- **E** Macros Group

VIEWS GROUP

The commands in the Views group allow you to view your document in different ways. Word 2016 provides five views for your document: **Read Mode, Print Layout, Web Layout, Outline, and Draft.**

Each view is optimized for a particular task and content type. You can quickly switch from one view to another.
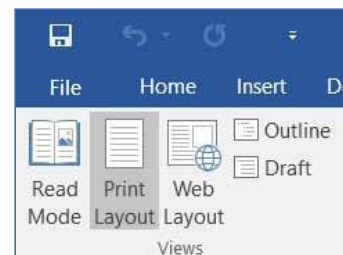
READ MODE

If you want to read or review a document instead of writing, the Read Mode view is best suitable.

To switch to the Read Mode view,

1 Click on the Read Mode command in the Views group.

A This view shows the document in a book style using columns, hiding the Ribbon and other screen elements. A Next and a Previous arrow button appears on both sides to move between pages. It also provides some tools specially designed to read a document.
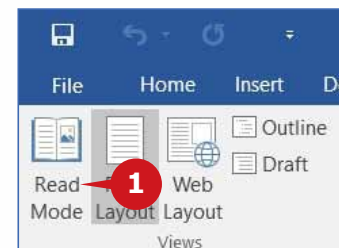
To exit from the Read Mode view, choose **Edit Document** from the View menu or just hit the **Esc** key on the keyboard.

PRINT LAYOUT

The Print Layout view is the default view when you create a new document. This view is often used to work with standard documents, such as letters, brochures, reports, etc.

To switch to the Print Layout view,

1 Click on the Print Layout command in the Views group.

A This View displays the document as it will appear on the printed pages. It follows the WYSIWYG (What You See Is What You Get) approach. This means the display of margins, headers and footers, breaking of paragraphs on pages, etc. matches to the printed output.

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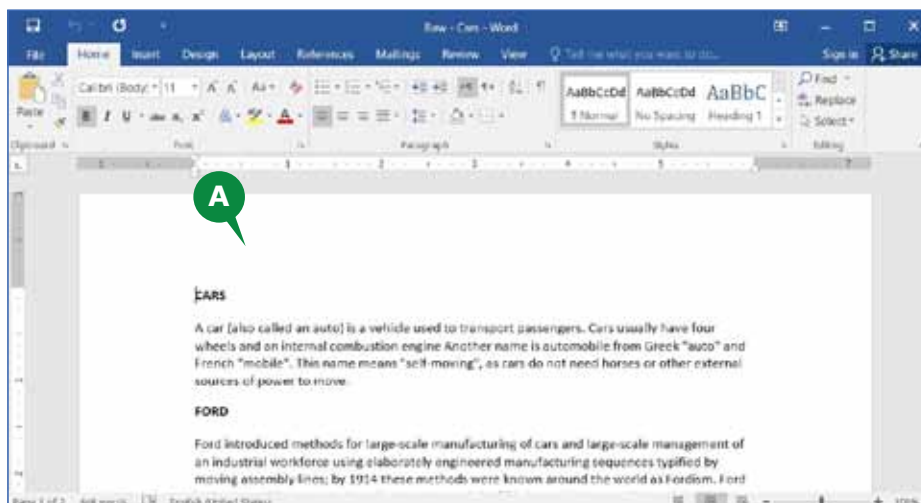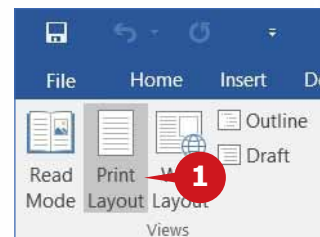
WEB LAYOUT

You can use the Web Layout view to create and edit pages that you intend to publish online. It simply provides an approximation of how content will appear when published online.

This layout is also great if you have wide tables in your document.

To switch to the Web Layout view,

1 Click on the Web Layout command in the Views group.

A The Web Layout view displays the document as a webpage.
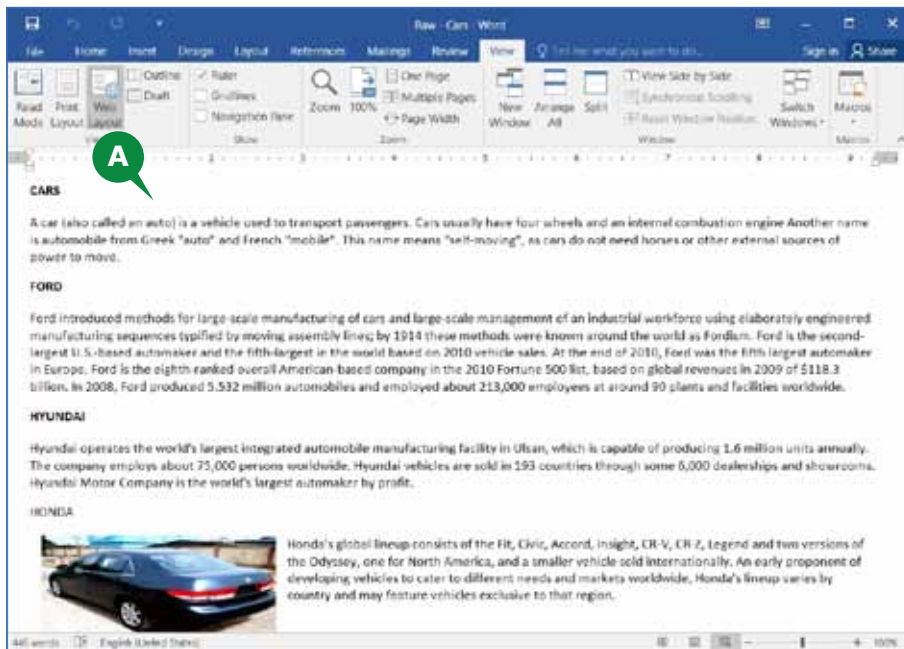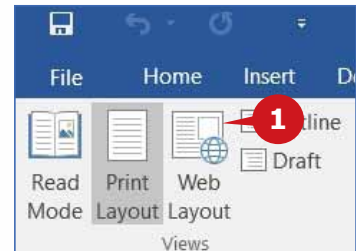
OUTLINE

The Outline view allows you to create an outline of a document and shows the content as a bulleted list.

In the Outline view, a contextual tab Outlining appears with various outline tools. By using the Outline tools, you can move your text up and down, expand and collapse levels, change heading levels, or show only one kind of heading level.

To switch to the Outline view,

1 Click on the Outline command in the Views group.

A It shows the document as collapsible levels of headings, providing a glance of the structure of the document.
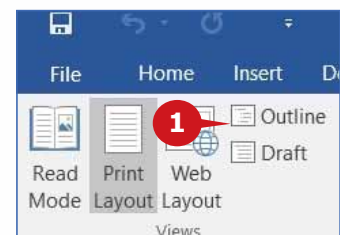
To exit from Ouline view, click on Close Outline View command from Close group in Outlining tab.
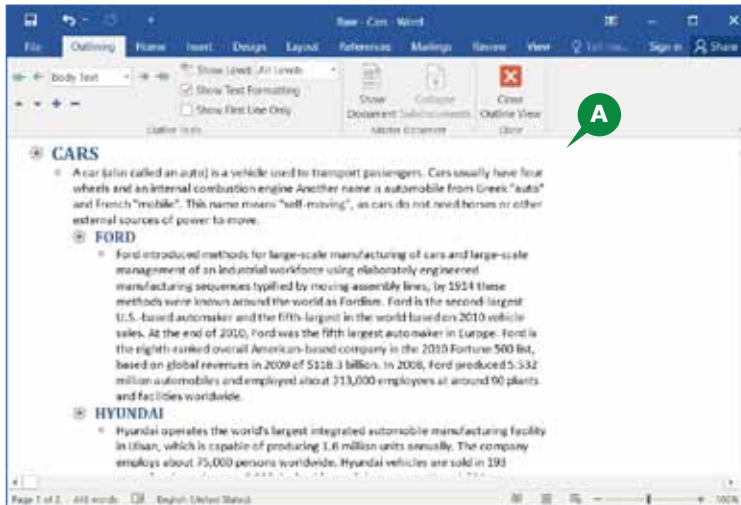
DRAFT

The Draft view is designed to edit and format text quickly. This view is useful when you have to focus on the content, rather than the printed output.

To switch to the Draft view,

1. Click on the Draft command in the Views group.
A. The Draft view enables you to type and edit quickly by simplifying the layout of the page.

Some page elements such as, the boundaries between pages, headers and footers, backgrounds, etc. do not appear in the Draft view.

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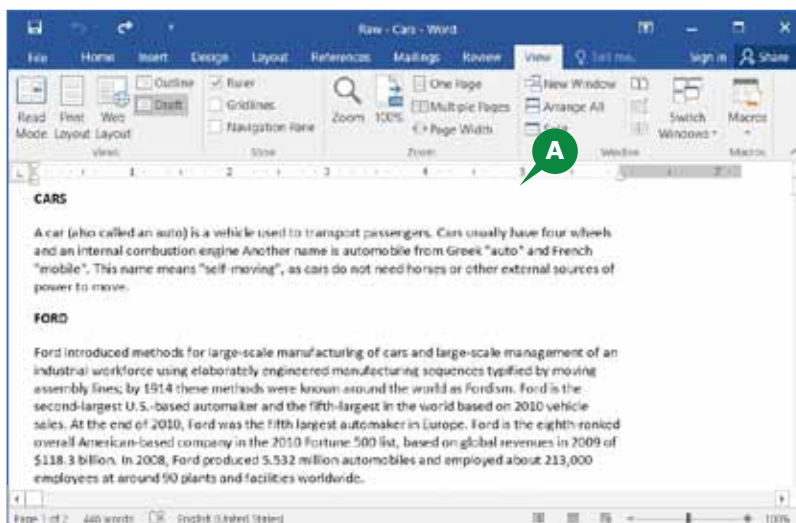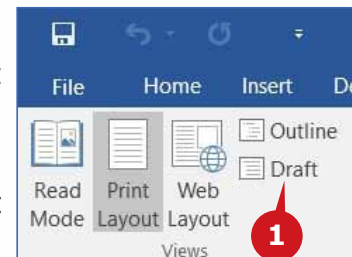
SHOW GROUP

The Show group on the View tab allows you to turn On/ Off features like Ruler, Gridlines and the Navigation Pane. Importance of some of these options are discussed in the following section.

SHOW/HIDE RULERS

The Rulers help you to align text, graphics, tables, and other elements in your document, horizontally or vertically.

To Show or Hide the Rulers,

1 Click on the check box of Rulers in the Show group.

A The Horizontal Ruler appears at the top of the document workspace. The horizontal ruler is visible in most document views.

B The Vertical Ruler appears along the left edge.
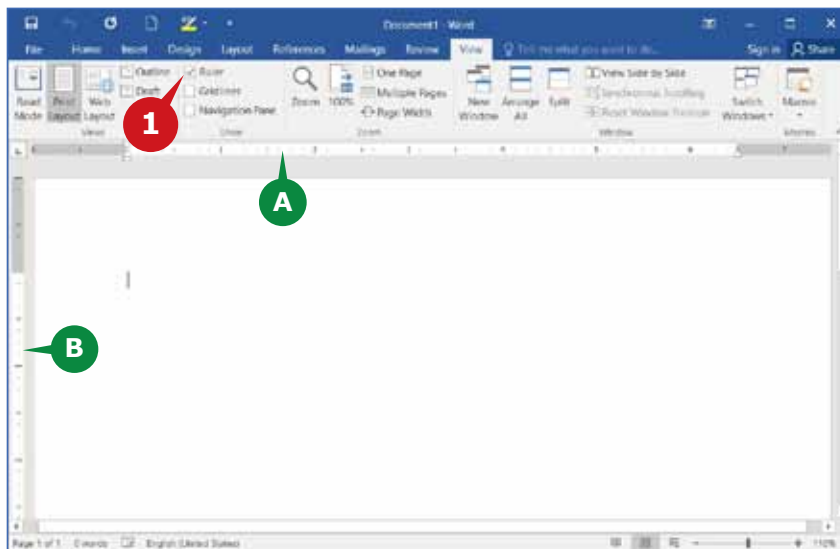
SHOW/HIDE GRIDLINES

The Gridlines give visual indications when you are formatting your document. It helps you to properly align shapes and other objects in your document. Gridlines are for visual reference only and cannot be printed.

To show the Gridlines,

1 Click on the check box of Gridlines in the Show group.

To hide the Gridlines, simply uncheck the Gridlines box.
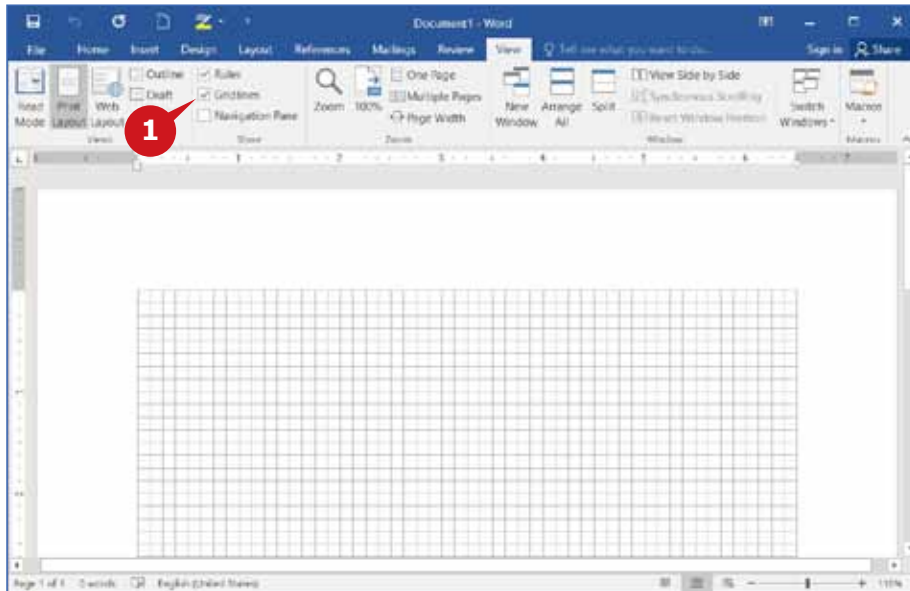
OTHER FEATURES OF WORD 2016

Apart from the editing and formatting features, Word 2016 enables you to convert or save your documents in different file formats. The following section demonstrates how to convert a Word 2016 document as a PDF file or a Word Template.

USING PDF FORMAT

Portable Document Format (PDF) is a platform-independent file format. It enables easy sharing and printing of documents. PDF is a widely accepted file format by many agencies and organizations.

You can use PDF format when you want a file that:

- Looks the same on most computers.
- Has a smaller file size.
- Complies with an industry format.

CONVERTING A DOCUMENT TO A PDF

Word 2016 provides direct conversion of a document into a **.pdf** file.
To convert an already opened Word 2016 document to a PDF file, follow the steps given below:

1. Click on the Export option in the File tab Backstage view.
2. Click on the Create PDF/XPS button.
A. The Publish as PDF or XPS dialog box appears.
3. Enter the name for the PDF file in the File name box.
4. Click on Publish button.
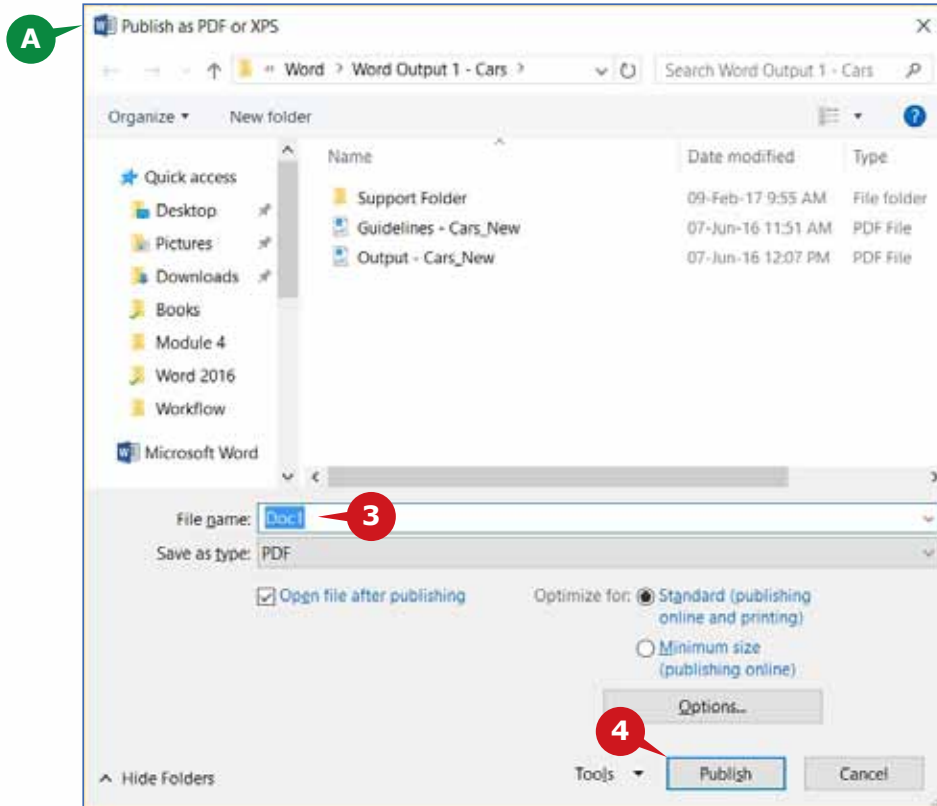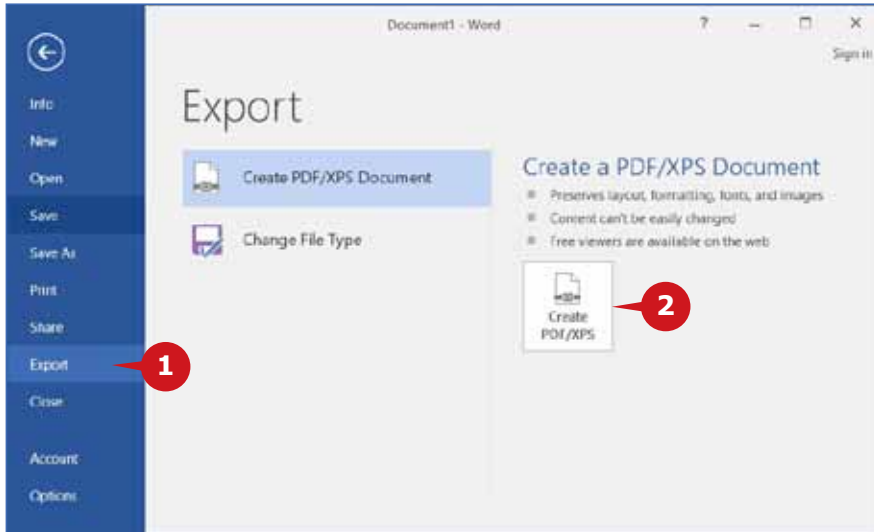
CREATING A TEMPLATE

A Template is a specialized pre-formatted document, which can be used to create a similar type of document. It allows quick creation of standard documents and saves time.

If you frequently work with a certain type of documents, such as a monthly report, a sales forecast, or a document with a company logo, you can save it as a Template.

SAVING A DOCUMENT AS TEMPLATE

By using the Templates feature of Word 2016, you can focus on the contents of the document and leave the formatting to the Template. A Template in Word 2016 is identified with the file extension **.dotx.**

To Create a Template from your open document, follow the steps given below:

1 Click on the Save As option in the File tab Backstage view.

2 Click on the Browse option.

A The Save As dialogue box appears.

3 Click on the Save as type drop down list.

4 Choose the Word Template option.

5 Enter the name for the Template in the File name box.

6 Click on the Save button.

To start a new document based on your template,

7 Click New option in the File tab Backstage view.

8 Click on the Personal category.

9 Click your Template.
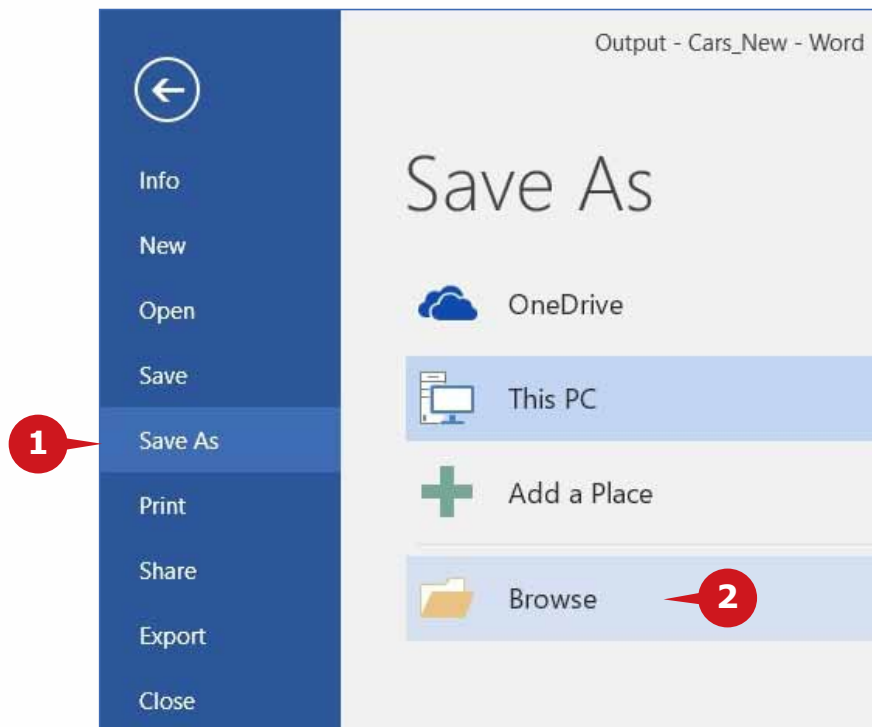
ACTIVITIES
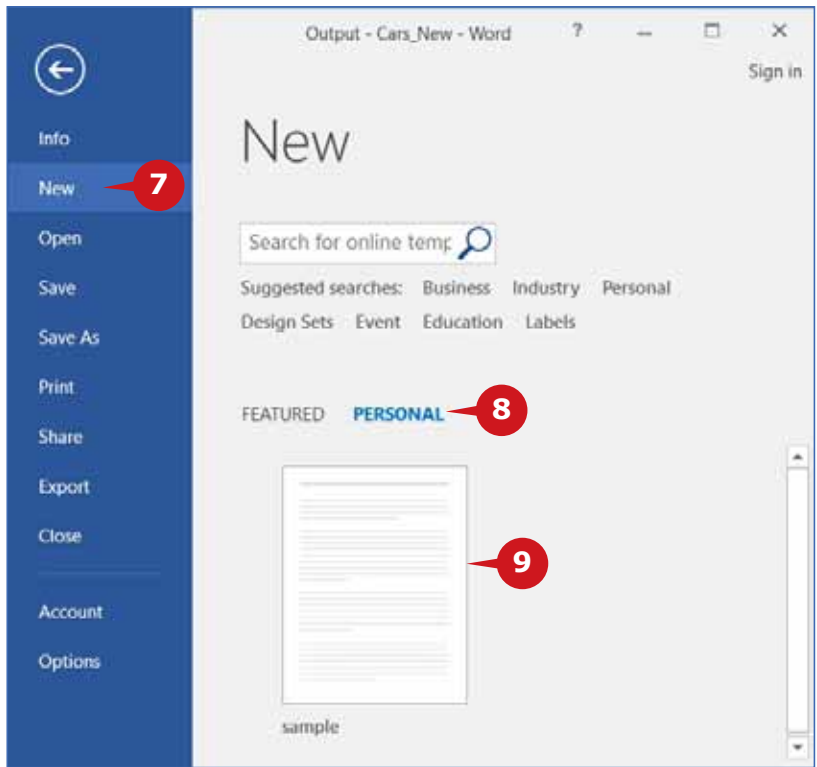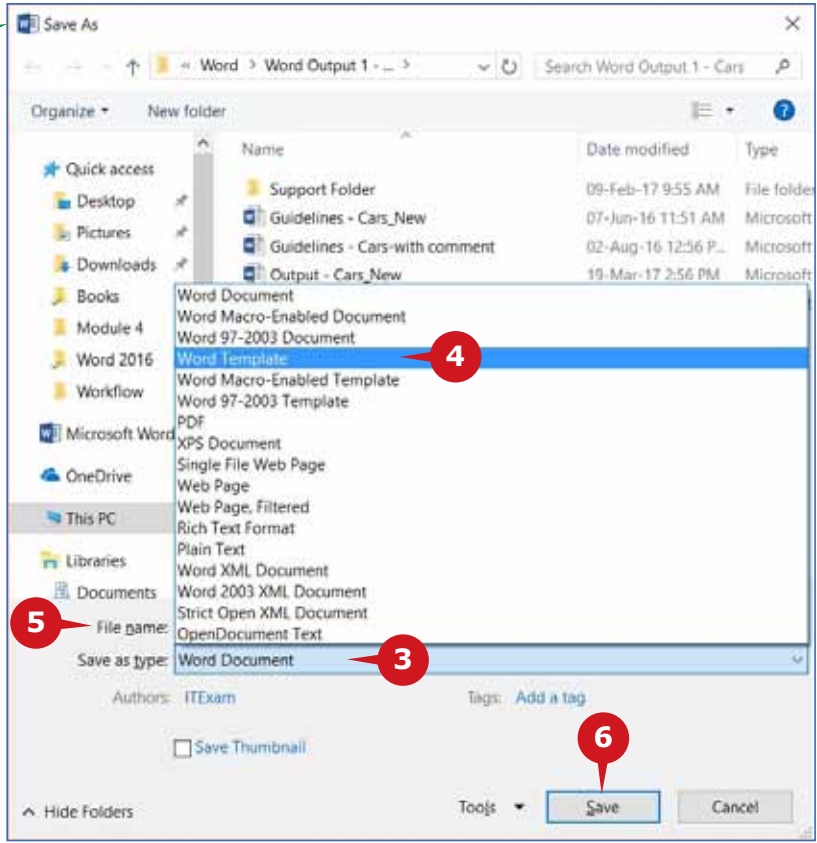
Activity 1

Choose the correct option for the following statements.

1. _____ is the default view of a new word document.

    a. Read Mode

    b. Web Layout

    c. Print Layout

    d. Outline Mode

2. The _____ are beneficial to properly align an object in the document.

    a. Underlines

    b. Gridlines

    c. Tables

    d. Templates

3. To show headers and footers, you must switch to _____ view.

    a. Read Mode

    b. Print Layout

    c. Web Layout

    d. Draft Mode

4. _____ is the file extension for a Template in Word 2016

    a. .dotx

    b. .docx

    c. .decx

    d. .txt

Activity 2

Fill in the blanks with the appropriate words provided in the box.

Print Layout	PDF	Read Mode	Web Layout	Template

1. _____ view displays the document as it will appear on the printed pages.

2. In _____ view, the Ribbon is hidden to maximize your reading area.

3. _____ is a platform-independent and widely accepted file format.

4. A _____is a pre-formatted document used to create documents with similar style.

Activity 3

Practice the following tasks on your computer.

1. Create a blank document. Insert random paragraphs by using **"=rand()"** function. Change the view of the document to Read Mode.

2. Change the View of the document to Print Layout and hide the Ruler.

3. Display the Gridlines in the document.

4. Save the document with the file name "Practice" and file type as "PDF".

Module Four

Spreadsheets (Excel 2016)

Session 14

OVERVIEW OF SPREADSHEETS, GETTING STARTED WITH EXCEL 2016 & THE HOME TAB

OBJECTIVES

General Objectives

In this Session you will understand Overview of Spreadsheets, Getting Started with Excel 2016 and The Home Tab.

Specific Objectives

At the end of this Session, you should be able to understand and practice:

- **Overview of Spreadsheets**
  - Spreadsheet Programs

- **Getting Started with Excel 2016**
  - Starting Excel 2016
  - User Interface of Excel 2016
  - New Features of Excel 2016
  - Create a simple Workbook
  - Managing Worksheets

- **The Home Tab**
  - Font Group

LEARNING

OVERVIEW OF SPREADSHEETS

In the previous module, you learnt to create well-designed documents using Word 2016 Application. You will now learn about Spreadsheet Application, which helps you to arrange and analyze large amount of data. Large and small companies use it for budgeting and other purposes. This module guides you through the basic knowledge and skills of Microsoft Excel 2016, which is the most widely used Spreadsheet Application.

SPREADSHEET PROGRAMS

A Spreadsheet is an application program used to organize and store data in a tabular form. It consists of rows and columns; used to manipulate data and perform calculations using mathematical formulas and functions. The Spreadsheet program is used to generate sales figures, sales taxes, commissions, corporate budgeting, etc.

FEATURES OF SPREADSHEET PROGRAMS

Spreadsheet programs are primarily used to organize and analyze information. They are popular because of their useful features, such as:

- Fast and effective data comparisons

- Automated calculations and AutoFill

- Functions and Formulas

- Charts

- Sort and Filter

POPULAR SPREADSHEET PROGRAMS

A number of spreadsheet programs are out there with lots of capabilities and functionalities. Given below are some of the popular spreadsheet programs.

- Microsoft Excel

- Apple iWork Numbers

- Corel Quattro Pro

GETTING STARTED WITH EXCEL 2016

Excel 2016 is a component of the Microsoft Office 2016 suite and is available for both Windows and Macintosh operating systems. Excel 2016 gives you a handy place to work with both textual and numerical data. You can create formulas, summarize information, show information in charts and do a lot more. The common scenarios to use Excel 2016 is for creating **Schedules, Inventory, Reports, Budgeting, Accounting, Planning** and much more.

STARTING EXCEL 2016

Excel 2016 is widely used spreadsheet program. To create workbooks, you need to open the Excel 2016 application.

To start Excel 2016 in Windows 10, follow the steps given below:

1. Click on the Start Button to open Start menu.
2. Locate and click on the Excel 2016 from All Apps list.

The **Start Screen** of Excel 2016 appears with a list of recently used files and available templates. You can either open an existing file, choose a template, or start with a new blank workbook. You can also press the **Esc** key to start with a new blank workbook.

USER INTERFACE OF EXCEL 2016

It is better to understand the user interface of Excel 2016 before you work with it. Excel's user interface is organized in tabs containing groups and commands. These commands enable you to work with the data contained in cells, rows, columns and worksheets. Different user interface elements of Excel 2016 are briefly mentioned below:

A. Ribbon: Ribbon consists of a set of commands placed under different tabs. Each tab is divided into groups, having logically related commands.

B. Tell Me Box: This box, located to the right of the ribbon tabs, allows quick access to Excel commands and features you want to use.

C. Ribbon Display Options: You can show or hide a ribbon to maximize or minimize your workspace. You can choose from the options: **Auto-hide the ribbon, Show Tabs only or Show Tabs and Commands.**

D. Worksheet: A Worksheet Sheet consists of cells organized into rows and columns. Worksheets are used to store and manage information in tabular form.

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E Cell and Active cell: The intersection of a row and a column in a worksheet is called a **Cell.** An **Active cell** is the currently selected cell; which is recognized by its green outline.

F Columns: Columns are the vertical divisions of a worksheet. The column headings are sequential letters at the top of each column to identify it e.g. A, B, C, and so on.

G Rows: Rows are the horizontal divisions of a worksheet. A row number identifies a specific worksheet row and appears along the left side of the worksheet e.g. 1, 2, 3, and so on.

H Name Box: To the left of the formula bar is the Name box, which identifies the selected cell, chart or other objects on the worksheet. Each cell has **cell address** identified by column letter and the row number (E.g. A1).

I Formula Bar: It displays the contents of the active cell and is mainly used to enter a formula to calculate cell data.

J Sheet Tab: The sheet tabs, at the bottom of the worksheet, displays the name of the sheets. Each sheet tab represents a separate worksheet in the workbook. Sheet tabs help you to manage different worksheets in a workbook.

K Status Bar: The horizontal bar at the bottom of the worksheet, below the sheet tabs, is the status bar. The status bar shows quick summaries of selected cells (count, sum, average, minimum or maximum values). You can change its status by right clicking on it and choosing which summaries to show. By default, status bar contains **View Buttons, Zoom Slider and Zoom Button.**
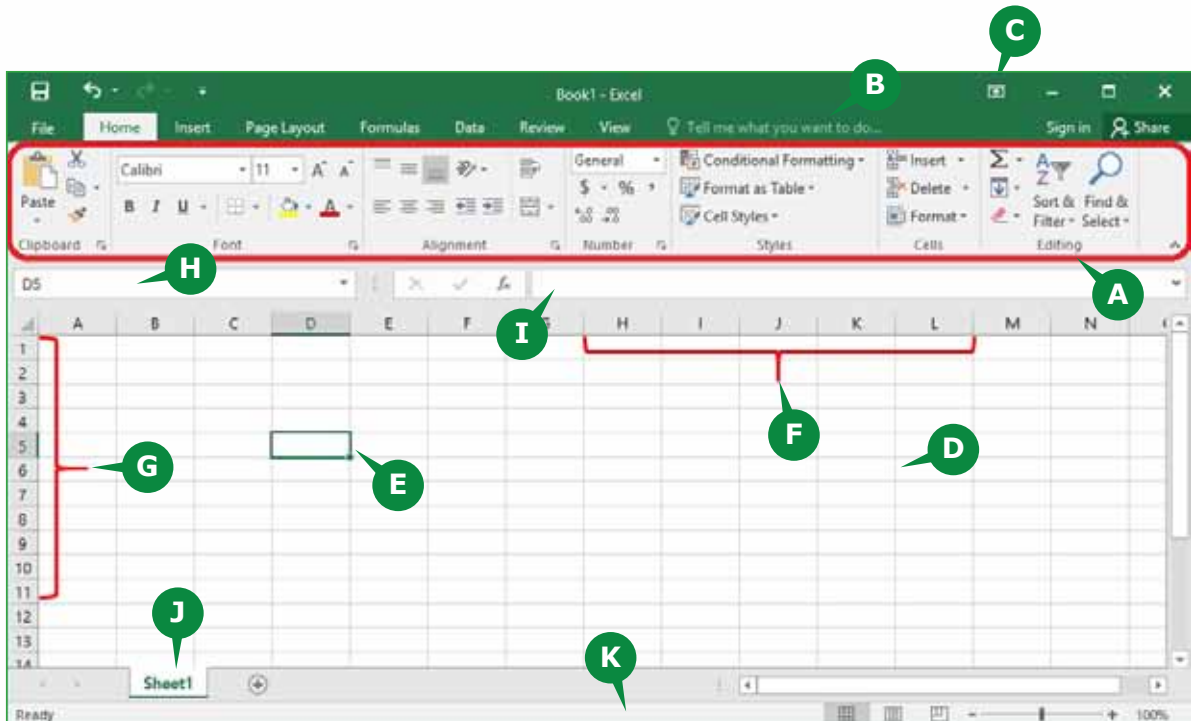
NEW FEATURES OF EXCEL 2016

Microsoft has added some new exciting features and enhancements in Excel 2016 such as **Tell Me box, Smart Lookup, New Chart types, Quick Analysis tool,** etc. Tell me box and Smart Lookup features work similar as discussed in module 3. One of the new features of Excel 2016 is **Quick Analysis Tool,** which is briefly mentioned below.

QUICK ANALYSIS TOOL

Quick Analysis Tool is the real time-saver, which helps you to instantly create charts, apply conditional formatting, table styles and quickly calculate data.

To use the Quick Analysis feature, follow the steps given below:

1 Select the range of cells containing data you want to analyze.

2 Click the Quick Analysis Button that appears to the bottom right of your selected data (or press CRTL + Q).

A It opens Quick Analysis gallery.

3 In the Quick Analysis gallery, select a tab For example, choose Formatting Tab to highlight data with colors.

4 Select an option, or just point to each one to see a preview.

B The selected data is highlighted with colors.
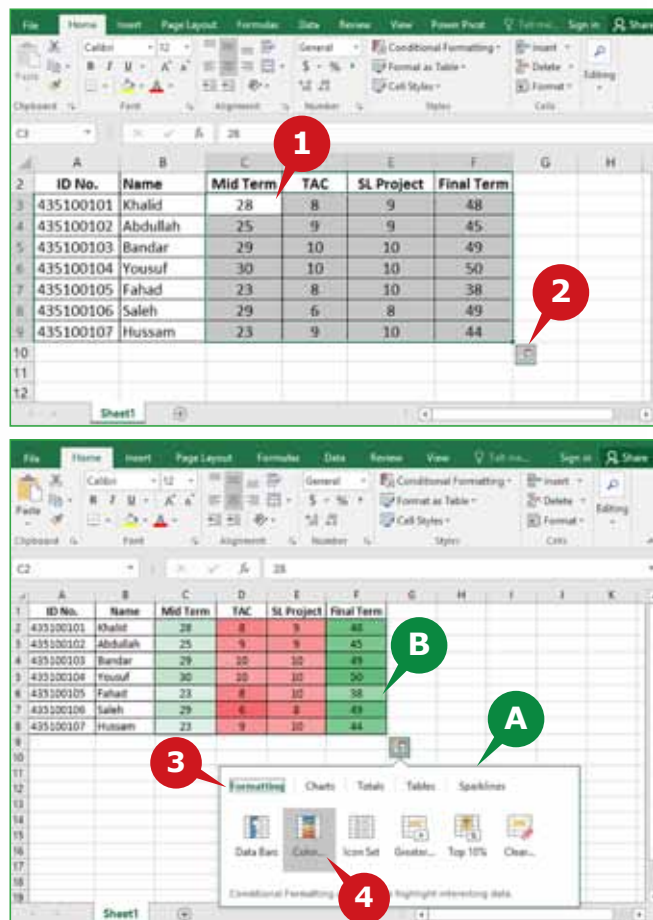
The options in the Quick Analysis Gallery change based on the type of data you have selected in your workbook.

CREATE A SIMPLE WORKBOOK

A **workbook** is simply an Excel file that contains one or more worksheets. You can create a workbook from a template or start with a blank workbook. **Templates** are predesigned workbooks that help you to create new workbooks with special formatting already available.

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CREATING A NEW WORKBOOK

To create a new workbook, click on File Tab and follow the steps given below:

1 Click on New option from Backstage view.

2 Click on Blank workbook to create a new workbook.

A Choose a template if you want to use a template.

TIPS

Excel workbook is saved with the extension ".xlsx*". Excel template is saved with the extension "*.xltx*".*
You can browse for online templates in the Search for online templates box .
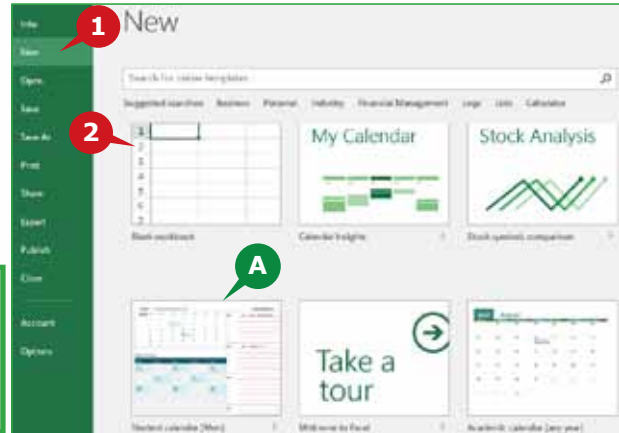
ENTERING DATA INTO CELLS

You can enter data into any cell of the Worksheet. The data you enter in a cell can be text, numbers, dates and formulas.

- To enter data in a cell, select the cell and type the data you want to enter.
- Press **ENTER KEY** or **TAB KEY**.
- The data appears in the cell and also in the Formula Bar.

EDITING CELL DATA

After entering data, you may like to make some changes.

- To edit the contents of a cell, **double click** on it and make the required changes.
- To delete the contents of cells entirely, select them and press the **Delete key.**
- To overwrite the contents of a cell, Select it and type new contents.

ADJUSTING COLUMN WIDTH

Sometimes all the data in a cell is not visible. You need to adjust the column width to display the entire cell contents.

To adjust the column width, follow the step given below:

1 Place the Mouse Pointer over the boundary between column headers and drag the column boundary to its right.

You can also **double click** on the boundary between column headers to automatically resize the column to fit the cell contents.
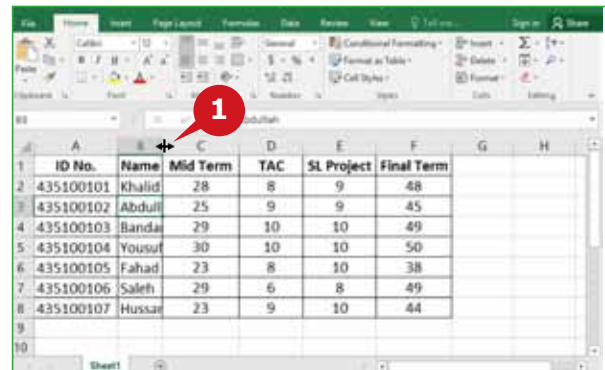
SELECTING MULTIPLE CELLS

In a worksheet, you may frequently need to select multiple cells to edit data, apply some formatting options, perform mathematical operations, etc.

To select sequential cells, follow the steps given below:

1 Click on a cell and drag the mouse over a group of cells you want to select.

A Excel highlights the selected cells in gray color.

B Use the Select All Button if you want to select all the cells in the worksheet.
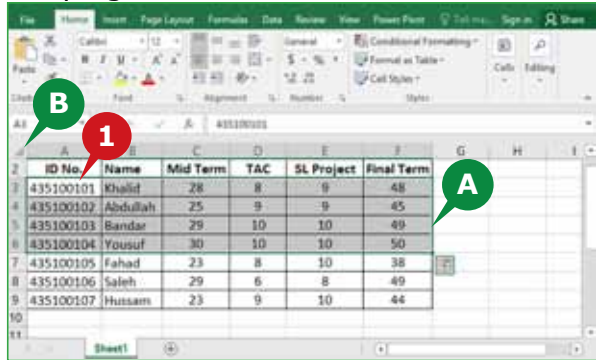
TIP

To select non-sequential cells, select the cell(s), hold down the CTRL key, and select additional cell(s).

USING NAME BOX

You can also use the **Name Box** to quickly locate and select specific cells or range of cells in a worksheet.

To select sequential cells using Name Box,

1 Enter the cell addresses of the first and last cells separated by a colon (:)
in the Name Box and press Enter key e.g. A2:F6.

A Excel highlights the selected cells in gray color.
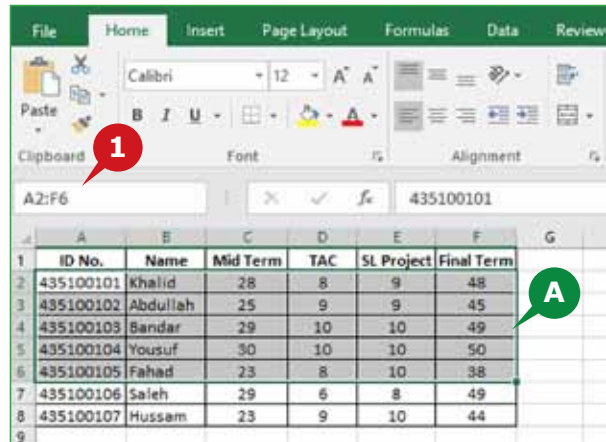
To select non- sequential cells using name box,

2 Enter the cell addresses separated by commas in the Name Box and press Enter key e.g. C3, D5, E8, F4.

B Excel highlights the selected cells in gray color.
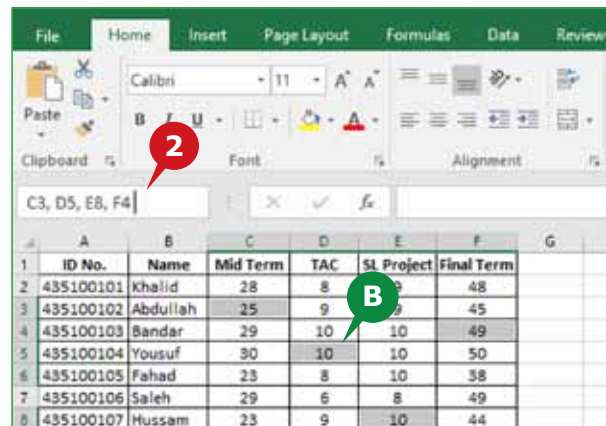
TIP

To select cells sequentially, click on any cell, hold down the "Shift" key, and click on the last cell you want to select.

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TIP

To resize name box, point to the right edge of the name box and drag the border to the right.

NAVIGATING A WORKSHEET

Since Excel worksheet contains data in cells, you need to move between cells or to different locations in the worksheet. There are different ways to navigate your worksheet.

Keyboard Navigation

You can use keyboard shortcuts for navigation, primarily to save the time while working with worksheets. Following are the keyboard shortcuts to navigate through a worksheet.

- Use the four Arrow keys (←, ↑, →, ↓) to move one cell left, right, up or down directions.
- Use TAB Key to move the active cell one column to the right in the worksheet.
- Use CTRL + Home to move the active cell to cell A1 in the worksheet.
- Use CTRL + End to move the active cell to the last cell in the worksheet that contains data.
- Use CTRL + Down Arrow key to move the active cell to the last row in excel sheet that contains data.
- Use CTRL + Right Arrow key to move the active cell to the last column in excel sheet that contains data.

Navigation using Scroll Bars

Similar to Word 2016, you can use scroll bars for easy navigation in Excel worksheets. You can quickly move to any part of the worksheet using Horizontal or Vertical Scroll Bars.

MANAGING WORKSHEETS

Excel 2016 allows you to work with multiple worksheets in a workbook. You need to manage multiple worksheets as each worksheet can contain a different set of data. For example, one worksheet can contain sales data, a second can contain inventory and third can contain your expenses. The following topics guide you to manage and classify multiple worksheets.

INSERTING A WORKSHEET

In Excel 2016, a workbook contains only one worksheet by default. You can insert more worksheets to your workbook.
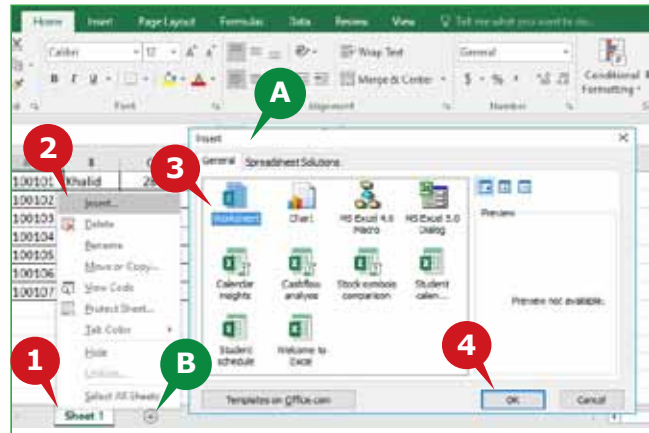
To insert an additional worksheet, follow the steps given below:

1 Right click on sheet tab.

2 Click Insert option from the popup menu.

A It will open Insert dialog box.

3 Click on Worksheet option.

4 Click on OK button to insert worksheet.

B You can also click on New Sheet button to insert a new worksheet.

TIP

Press Shift+F11 to insert a new Worksheet.

DELETING A WORKSHEET

You can delete a worksheet that you no longer need in your workbook.
A worksheet can only be deleted if the workbook contains more than one worksheet.

To delete a worksheet, follow the steps given below:

1 Right click on the sheet tab you want to delete.

2 Click Delete option from the popup menu.

A Excel prompts you with a box to confirm the deletion if the excel sheet contains data.

3 Click on Delete button to delete the worksheet.
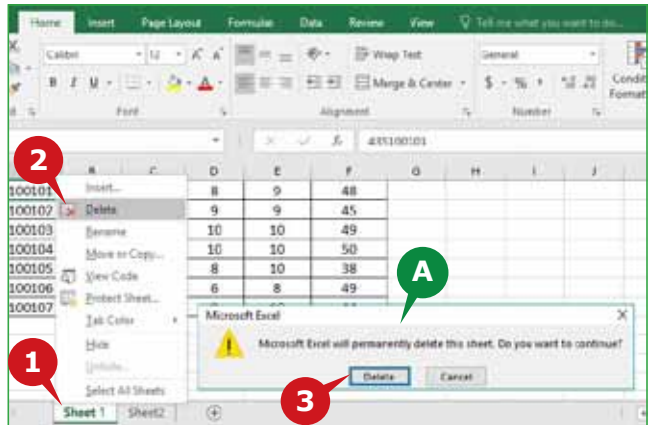
RENAMING A WORKSHEET

Excel 2016 assigns a default name to each worksheet in a workbook like Sheet1, Sheet2. You can give specific names to worksheets to help you identify their content.

To rename a worksheet, follow the steps given below:

1 Right click on the sheet tab you want to rename.

2 Click Rename option from the popup menu and type a new name for the worksheet.

TIP

Double click on the worksheet tab to rename it.

239
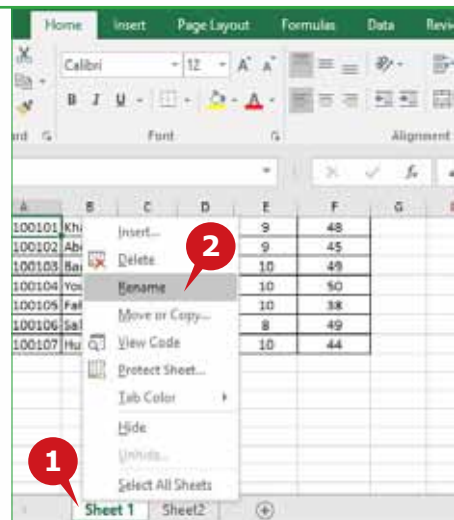
MOVE OR COPY A WORKSHEET

Moving a worksheet within the same workbook or to a different workbook is helpful to keep worksheets in order. Copying a worksheet helps you to use the same worksheet in the same or different workbook.

To Move or copy a worksheet, follow the steps given below:

1 Right click on the sheet tab you want to Move or Copy.

2 Select Move or Copy option from popup menu. It opens Move or Copy dialog box.

A You can move selected sheet to another workbook.

B You can move selected sheet in the same workbook.

3 Select Create copy checkbox to copy the worksheet.

4 Click on OK button.

C Worksheet is copied.
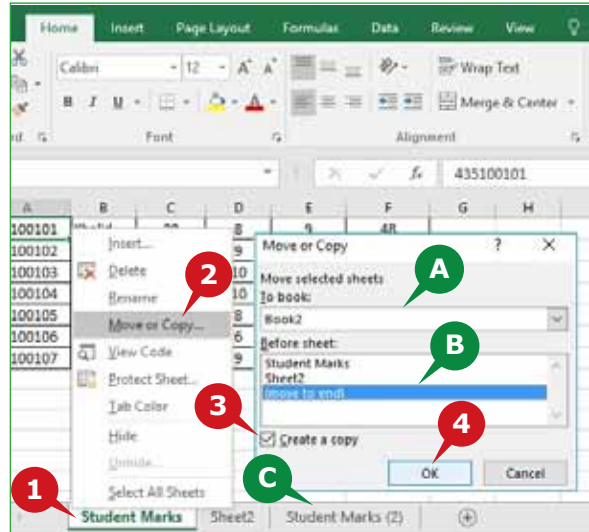
CHANGING TAB COLOR

A tab color applied to worksheet tabs, help you to identify different worksheets in a workbook.

To apply a tab color, follow the steps given below:

1 Right click on the sheet tab and point to Tab Color option from popup menu.

2 Choose a color from the displayed color palette.

A The tab color of the worksheet changes instantly.
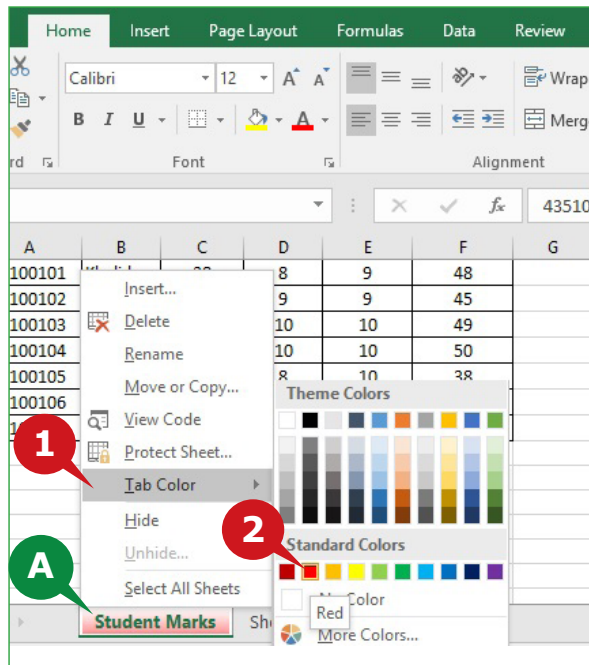
TIP

You can also Insert, Delete, Rename, Move or copy sheet and change Tab color from cells group of the Home Tab.

OTHER SHEET OPTIONS

While working with a workbook, you may need to select all worksheets or secure your worksheet from other users.

When you right click on a sheet tab, it also displays the following options:

A Select All Sheets: Selects all worksheets so that a formatting option can be applied at once, like Tab color.

B Hide: Makes a worksheet invisible from sheet tabs.

C Protect Sheet: Allows you to prevent unwanted changes from users by limiting their ability to edit the worksheet.

THE HOME TAB
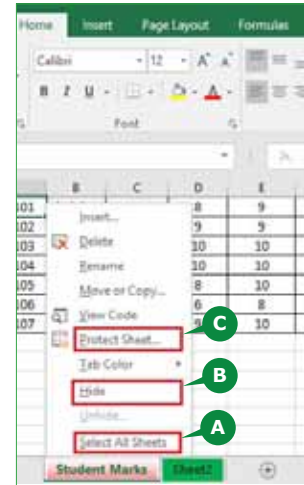
The Home Tab provides a collection of commonly used commands for easy access. Following are different groups in the home tab.
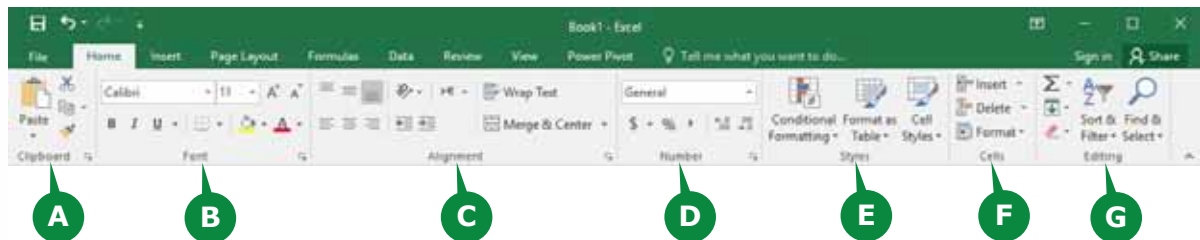
A Clipboard: This group contains main editing commands such as cut, copy and paste.

B Font: This group contains commands used to apply range of formatting options.

C Alignment: This group contains commands used to position cell data and merge cells.

D Number: This group contains commands used to apply different number formats to data.

E Styles: This group contains commands used to apply various styles.

F Cells: This group contains commands used to add, delete and format cells, rows, columns and worksheets.

G Editing: This group contains commands used to sort, filter and calculate data.

THE FONT GROUP

The basic formatting commands of Word 2016 are also available in Excel 2016. The commands of the Font group enable you to modify and enhance the appearance of your data.

APPLYING FONT AND FONT SIZE

Font is a particular size, weight and style of a typeface. It is a graphic design applied to numerals, symbols, and text in a worksheet. The proper choice of **font size** makes your data easily readable.

To apply Font to the selected cells:

1 Click on Font Box in Font Group and choose a suitable font.

To apply Font Size to the selected cells:

2 Click on Font Size Box in Font Group and choose a suitable font size.

To increase or decrease font size for the selected cells:

3 Click on Increase Font Size or Decrease Font Size accordingly.
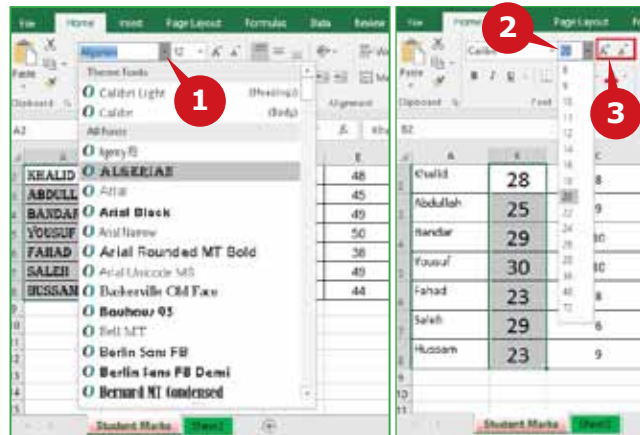
APPLYING FONT STYLES

Font styles are used to make specific data appear visually different from other data in a worksheet. For example, **Bold** can make the headings appear thicker. Similarly, to draw attention to important data, you can **underline** it.

To apply Font Styles to the selected cells, choose the desired option:

A Bold: To make data appear as thick.

B Italic: To change data to slant position.

C Underline: To insert single or double line under the selected data.
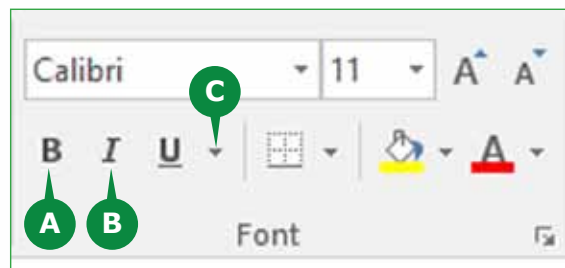
APPLY FILL COLOR AND FONT COLOR

Fill color is the cell background color used to highlight the cells. The organization of data in worksheets can be made more specific by applying a set of fill colors. **Font color** makes your data appear more attractive and visible.

To apply a Fill Color, Select a cell or range of cells and follow the steps given below:

1 Click on dropdown arrow of Fill Color command in the Font group.

2 Choose a color from the color palette.

A Fill color is applied.

In the same way, you can use the **Font Color** command to change the font color of the selected data.
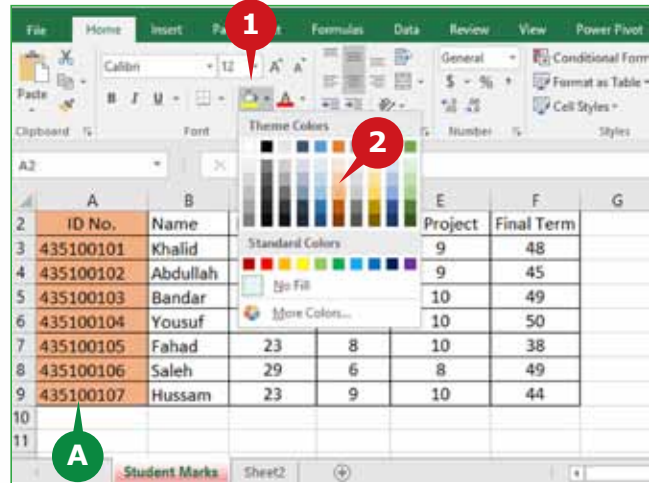
APPLYING BORDER

While organizing your data, you can apply borders to clearly separate data from surrounding cells. It simplifies the analysis of information. You can use the Border command to apply **Borders** to the selected range of cells.

To apply Border, select a cell or range of cells and follow the steps given below:

1 Click on the dropdown arrow of Border command in the Font group.

2 Select an appropriate border from the list; e.g. All Borders.

A All Borders are applied.
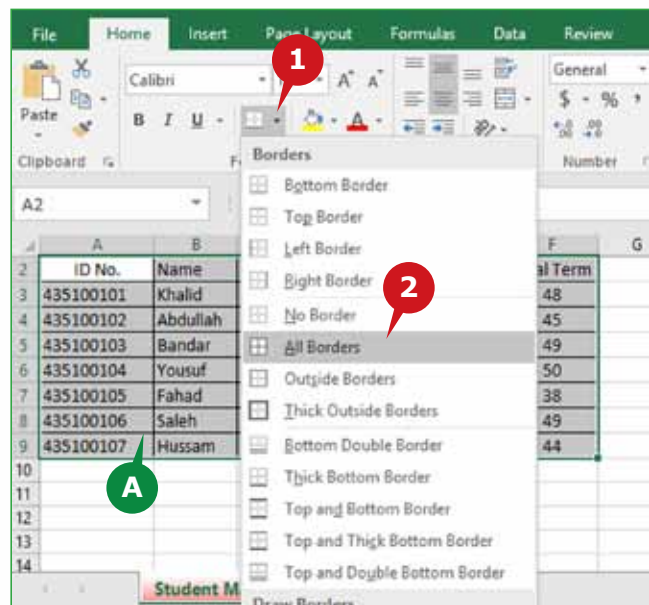
TIP

You can choose No Borders *to* remove *the borders from selected range of cells.*

THE FORMAT CELLS DIALOG BOX

The **Format Cells dialog** box is used to apply a combination of various formatting options to the selected cells such as **font, font size or font color.** You can also apply additional formatting such as **strikethrough** using this dialog box.

To Open and Use Format Cells dialog box, follow the steps given below:

1 Select a cell or range of cells.

2 Click on the Dialog Box Launcher at the bottom right in the Font group.

A This opens the Format Cells dialog box.

3 Choose various formatting options you want to apply.

4 Click on OK button to apply the changes.
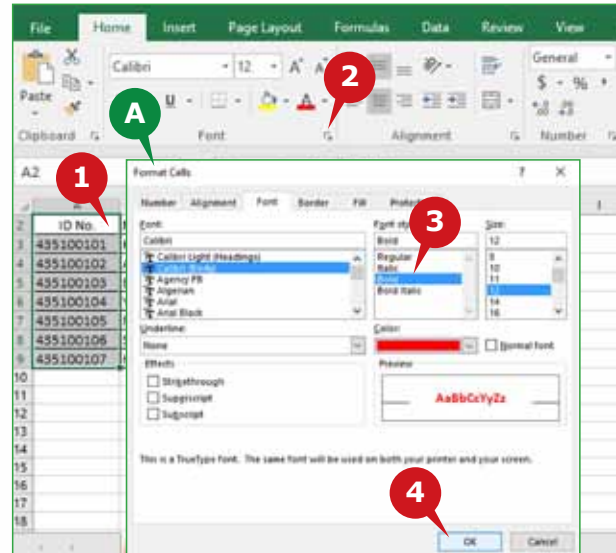
ACTIVITIES

Activity **1**

Choose the correct option for the following statements.

1. Which of the following is not a spreadsheet program?

   a. Microsoft Excel

   b. Corel Quattro Pro

   c. Apple iWork Numbers

   d. Microsoft Word

2. An Excel 2016 workbook is a collection of _____.

   a. Documents

   b. Worksheets

   c. Templates

   d. Pictures

3. By default, how many sheets are there when you create a new blank Workbook in Excel 2016?

   a. 3

   b. 1

   c. 2

   d. 4

4. The keyboard shortcut to insert a new Worksheet is _____.

   a. Shift + F1

   b. Ctrl + N

   c. Shift + F11

   d. Shift + F6

Activity **2**

Fill in the blanks with the appropriate words provided in the box.

Hide	Quick Analysis	Name Box	Fill color	Formula Bar

1. _____ tool allows you to instantly create charts, apply conditional formatting and quickly calculate data.

2. The_____ command is used to change the background color of cells.

3. _____ displays the contents of the active cell and is used to enter a formula.

4. You can use _____ option to make a worksheet invisible from workbook.

Activity **3**

Practice the following tasks on your computer.

1. Create a blank Workbook. Type the text "Welcome" in the cell A1, apply the font style as "Bold" and font color as "Purple". (Hint: You can save this file with the name "Practice" on the desktop.)

2. Select the cell range from A1 to A6 using the Name box.

3. Apply "All Borders" to the cell range from A1 to A6.

4. Insert a new worksheet and Rename it as "Student Marks". Change the Tab Color to "Blue" and move this sheet before the "Sheet 1".

Session 15

ALIGNMENT, NUMBER AND STYLES GROUPS OF THE HOME TAB

OBJECTIVES

General Objectives

In this Session, you will learn about the **Alignment Group**, **Number Group** and **Styles Group** of the Home Tab.

Specific Objectives

At the end of this Session, you should be able to understand and practice:

- **The Home Tab**
  - Alignment Group
  - Number Group
  - Styles Group

LEARNING

THE HOME TAB

In the previous session, you learnt about the Font group of the Home Tab. This session will guide you to explore the Alignment group, Number group and Styles group of the Home Tab.

THE ALIGNMENT GROUP

Excel aligns text to the left position and numbers to the right position of the cell, by default. The Alignment group helps you to change horizontal and vertical alignment of cell data. The commands of this group also enable you to display the data around different positions in a cell, combine a range of cells and adjust the cell data if it does not fit a cell.

ADJUST HORIZONTAL CELL ALIGNMENT

Horizontal alignment determines the position of the data within a cell relative to the left and right borders of the cell.

The horizontal alignment allows following options.

A Align Left: Select this option to align cell content to the left edge of a cell.

B Center: Select this option to center align your content.

C Align Right: Select this option to align cell content to the right edge of a cell.
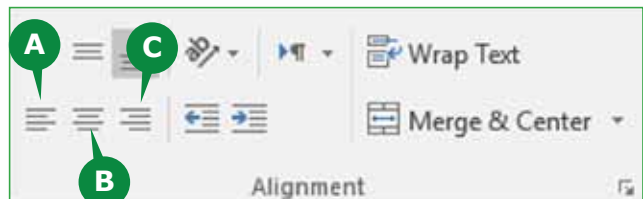
ADJUST VERTICAL CELL ALIGNMENT

Vertical alignment determines the position of the data within a cell relative to the top and bottom borders of the cell.

The vertical alignment allows following options

A Top Align: Select this option to align cell content to the top of the cell.

B Middle Align: Select this option to align cell contents centered between top and bottom of a cell.

C Bottom Align: Select this option to align cell contents to the bottom of the cell.
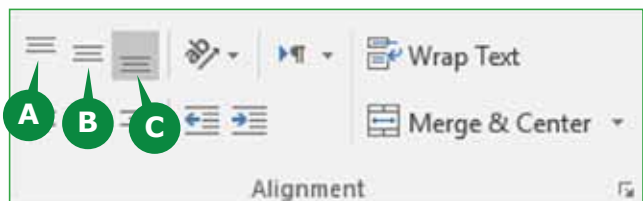
TEXT ORIENTATION

The **Orientation** command is used to rotate cell contents diagonally or vertically. You can use this feature when a column is not wide enough to display its contents.
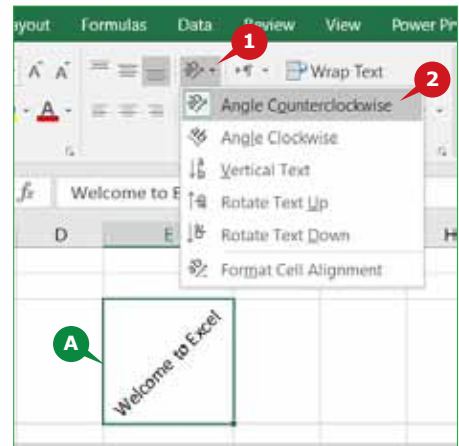
To Rotate Cell data, follow the steps given below:

1 Select the cell containing data and click on dropdown arrow of Orientation command in the Alignment group.

2 Choose an orientation option from the drop down list.

A The orientation is applied to the cell or range of cells you selected.

WRAP TEXT

When the data in a cell is extra-long, it occupies more than one cell if the cell next to it is empty. You can use **Wrap text** command to display long text into multiple lines so that you can see all of it.

To apply wrap text, follow the steps given below:

1 Select the cell containing data.

2 Click on Wrap Text command in the Alignment group of Home Tab.

A The data appears on multiple lines.
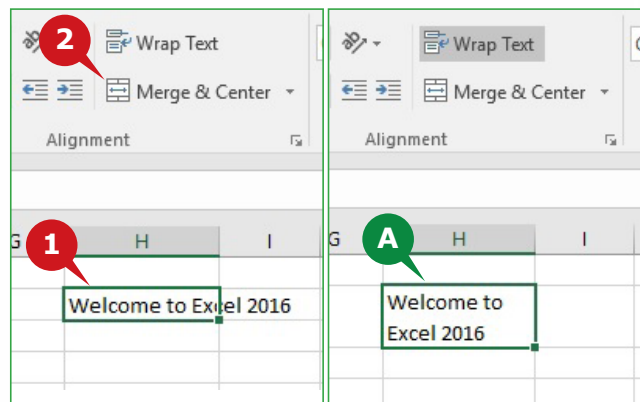
MERGE AND CENTER

The **Merge and Center** command combines selected cells into one larger cell and centers the contents. When you merge two or more adjacent horizontal or vertical cells into one cell, the cell is displayed across multiple columns or rows. You can use this feature to create labels that spans multiple columns or rows.

To merge and center, follow the steps given below:

1 Select a range of cells you want to merge.

2 Click on Merge and Center command in the Alignment group.

A The contents of the selected cells are merged and centered.
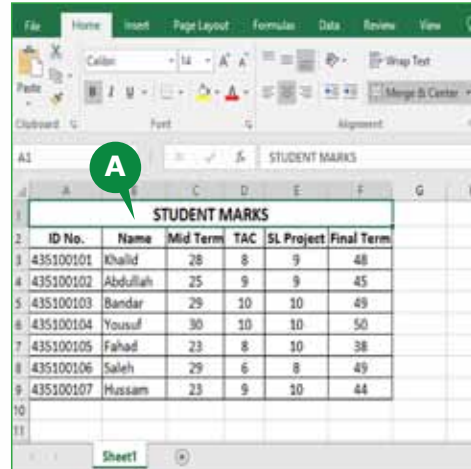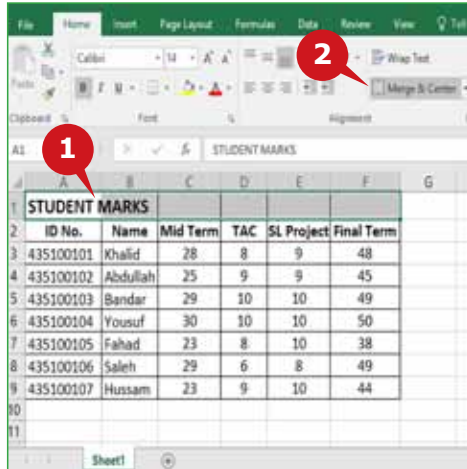
NUMBER GROUP

Excel 2016 provides you with options to display numbers as percentage, currency, date, fraction etc. The Number group is used to apply different number formats to numerical data in a worksheet. This group contains the commands such as Number Format, Increase Decimal, Decrease Decimal etc.

APPLYING A NUMBER FORMAT

The **Number Format** box allows you to choose a format for the data such as Currency, Accounting, Date, Percentage etc. You can choose different number formats to change the appearance of a number without changing the number itself. A column containing prices of different items is better displayed by applying a Currency symbol such as **$, SAR** etc. A column containing Percentage of different numbers is better displayed by applying a Percentage (%) symbol.

To apply **Currency** format to selected cells, follow the steps given below:

1 Click on the arrow of Number Format box.

2 Click on the Currency option.

A Default Currency format ($) is applied to selected cells.

To apply Date format to the selected cells:

3 Click on the Short Date option from the Number Format box.

B The Date format is applied to selected cells.
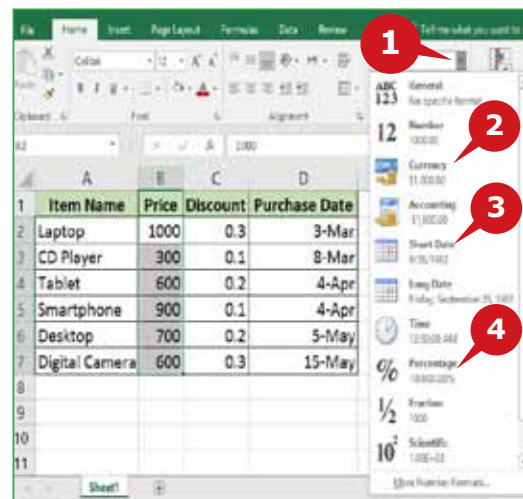
To apply Percentage (**%**) format to the selected cells:
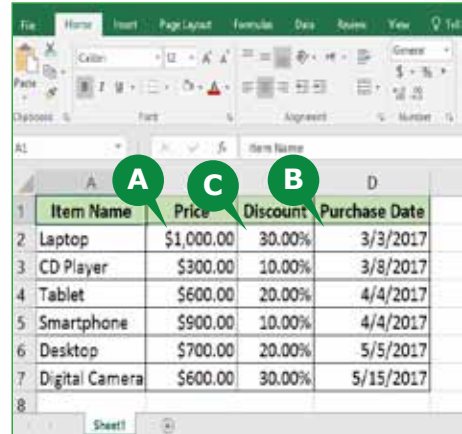
4 Click on the Percentage option from the Number Format box.

C The Percentage format (%) is applied to selected cells.

TIP

The default Currency format is $ symbol. You can apply different currency symbols such as SAR, from format cells dialog box of Number Group.

More Number Formats

The following table provides a summary of some other number formats that are available in the Number group of Home Tab in Excel 2016.

Format	Example	Use
General	4567	The default number format that Excel applies when you type a number. The numbers you type are right aligned in the cell.
Number	4567.00	Used to display numbers with decimal point and decimal places.
Accounting	$ 4,567.00	Used for monetary values like Currency format but aligns the Currency symbol at the left edge of the cell. This format is mostly used for accounting purposes.
Time	12:00:00 PM	Displays number as Time values.
Fraction	55.75 → 55 3/4	Displays a number after decimal point as a fraction.
Scientific	4570 → 4.57E+03	Displays a number in exponential notation, replacing part of the number with E+n, where E stands for Exponent and n represents the number, which is the nth power of the Exponent.
Text	KSU 18	Treats the content of a cell as text and displays the content exactly as you type it, even when you type numbers.
Special	000-00-4567	Displays a number as a postal code, phone number, or Social Security Number.

INCREASE / DECREASE DECIMAL

Increase Decimal and **Decrease Decimal** commands allow you to change the number of decimal places after the decimal point to better display your numerical data. You can show more or fewer number of digits after the decimal point of a number. The number of decimal places to be increased or decreased depend on whether you want to show your data more precise or less precise.

To increase or decrease decimal places for selected numbers, follow the steps given below:

1 Click on the Increase Decimal command in the Number group to increase the decimal places.

A The Decimal places are increased.

2 Click on Decrease Decimal command in the Number group to decrease the decimal places.

B The Decimal places are decreased.
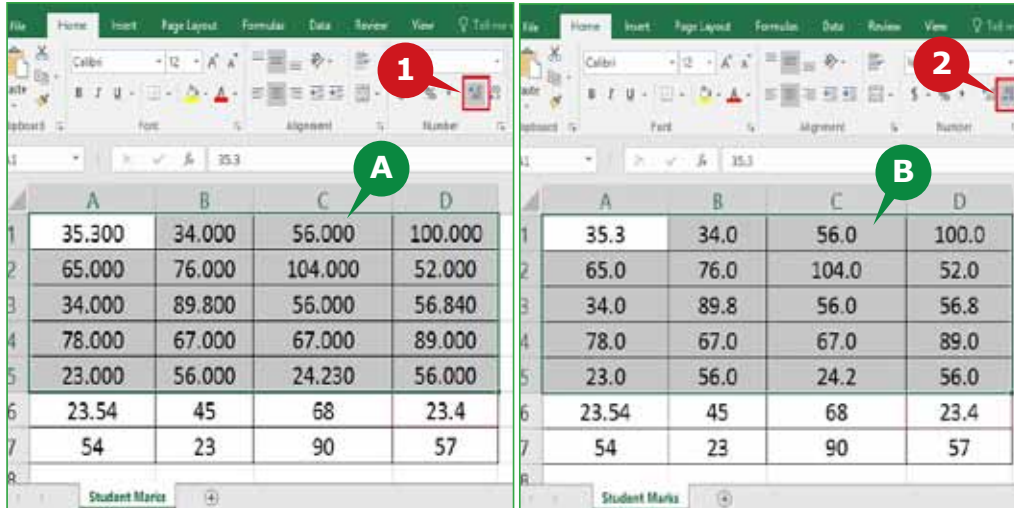
After you apply a number formatting e.g. Long Date or you increase decimal places, Excel 2016 displays #####
in the cell, indicating that the cell is not wide enough to display the data. You need to increase the column width to
see the cell contents.

SPECIFYING DECIMAL PLACES

By default, Excel 2016 displays two **(2)** decimal places for Currency, Percentage and Number format. You can specify the number of decimal places to be displayed after the decimal point of a number.

To specify decimal places for Number format, follow the steps given below:

**1** Click on Dialog Box Launcher arrow in the Number group.

A Format Cells Dialog Box appears.

2 Select Number option from the category list.

3 Specify the number of decimal places in the box next to Decimal places.

4 Click on the OK button.
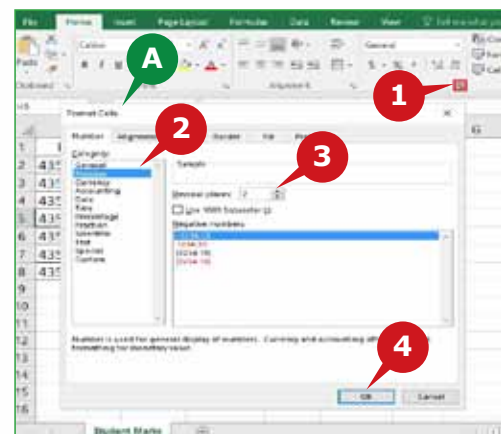
STYLES GROUP

A style is a set of formatting characteristics that is applied to cell(s) at once. You can use several formatting styles to create professional-looking worksheets that display your data effectively. The commands of the Styles Group enable you to apply pre-defined formatting styles to quickly format cells. This group contains the following commands:

A Conditional Formatting: This command is used to apply different formatting styles to a range of cells that meet specified conditions.

B Format as Table: This command is used to quickly format a range of cells and convert it to a table, by choosing a pre-defined table style.

C Cell Styles: This command is used to apply a cell style to a range of cells, by choosing a pre-defined cell style.
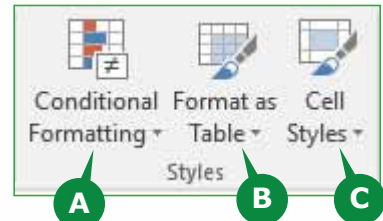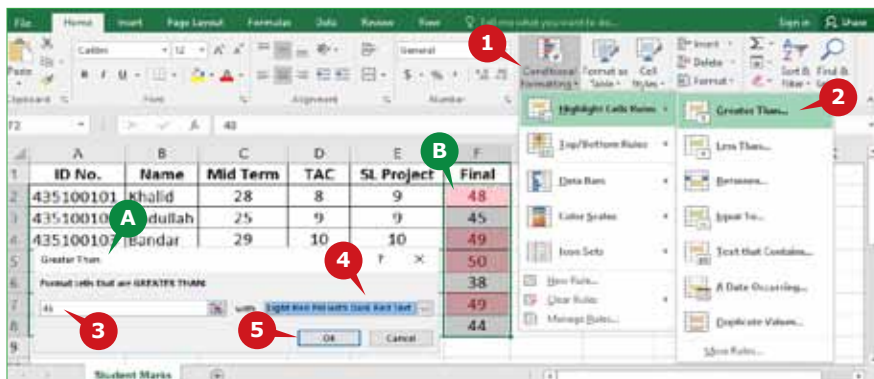
APPLYING CONDITIONAL FORMATTING

Conditional formatting is used to apply colors, data bars or icon sets to the cells containing values that meet specific criteria or condition. For example, you can apply various colors or formatting options to visually highlight different values in the cells based on a criteria such as Less Than, Greater Than, Between, Equal To, etc. By applying conditional formatting to your data, you can quickly identify variations in a range of values with a quick glance.

To apply Conditional Formatting to selected data, follow the steps given below:

1 Click on Conditional Formatting command in the Cell Styles group.

2 Point to Highlight Cell Rules option and click on the Greater Than option.

A The Greater Than dialog box appears.

3 Enter the number (greater than condition) in the Greater Than dialog box.

4 Choose a required formatting option.

5 Click on the OK button.

B The cells that are greater than the entered number are highlighted with the selected formatting style and the other cells remain unchanged.
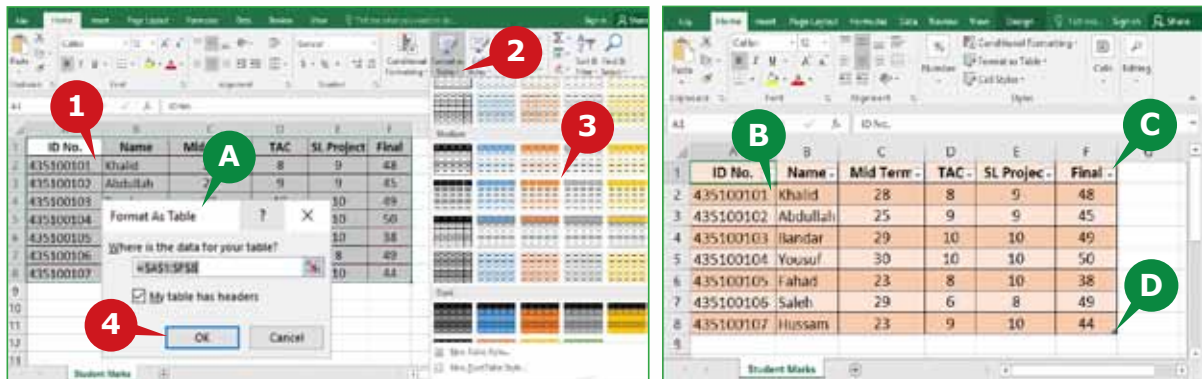
FORMAT AS TABLE

You can apply a table style to a group of related data in a worksheet. This helps you to easily manage and analyze the data. You can quickly sort or filter data and resize the table using the Sizing Handle.

To apply a Table Style, follow the steps given below:

1 Select the cell range.

2 Click on Format as Table command in the Styles group.

3 Select a Table Style from the gallery that appears.

A The Format As Table dialog box appears showing the selected cell range and an option to select whether it has table headers.

4 Click on the OK button.

B Table Style is applied to selected cell range.

C You can use the Filter Control in the Header row to sort and filter table data.

D A Sizing Handle in the lower-right corner of the table allows you to resize the table.

APPLYING CELL STYLES

To make your important data standout in a worksheet, you can apply a colorful cell style. A cell style is a set of formatting characteristics, such as a font, font size, cell border and cell shading. Cell Styles allow you to apply several formatting styles in one step and ensures that cells have consistent formatting.

To apply a Cell Style to the selected cells, follow the steps given below:

1 Click on the Cell Styles command in the Styles group.

2 Select a desired style from the gallery that appears.

A The cell style is applied to the selected cells.
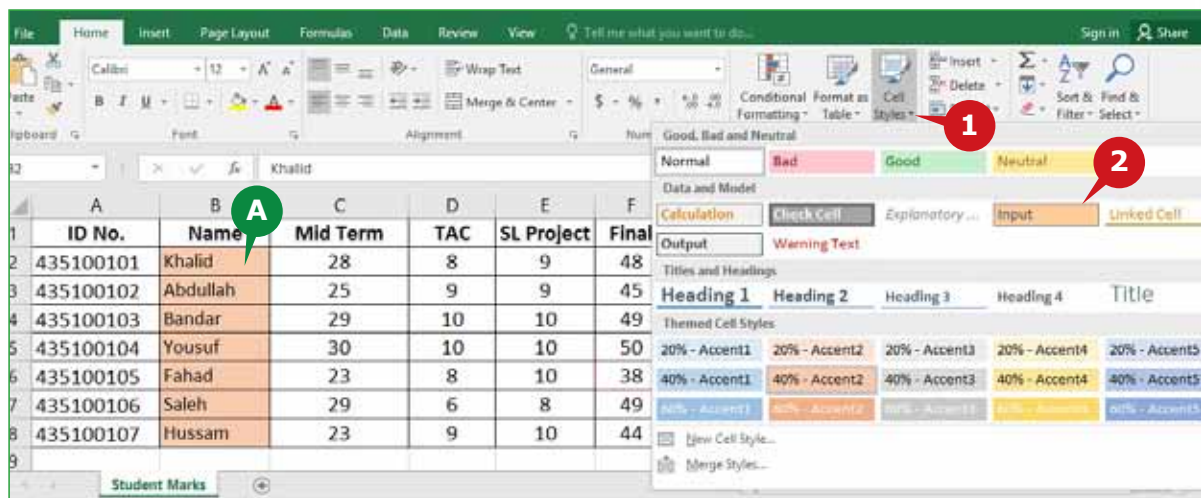
ACTIVITIES

Activity   **1**

Choose the correct option for the following statements.

1. You can use the _____ command to display long text into multiple lines within a cell.

    a. Text Orientation

    b. Middle Align

    c. Wrap Text

    d. Merge and Center

2. _____ is the default number format for a cell.

    a. General

    b. Text

    c. Fraction

    d. Number

3. The _____command enables you to apply a pre-defined table style to a range of cells.

    a. Border

    b. Format as Table

    c. Table

    d. Create Table

4. _____ is used to highlight a range of cells that meets some specific criteria.

    a. Number Formatting

    b. Format as Table

    c. Conditional Formatting

    d. Cell Format

Activity 2

Fill in the blanks with the appropriate words provided in the box.

Text	Cell Styles	Number	Orientation	Currency

1. The _____ command allows you to rotate cell contents in several directions.

2. By default, Excel aligns _____ to the left position in a cell.

3. The _____ format shows numeric data in cells as monetary values.

4. The_____ command allow you to apply several formatting effects to a cell in one step.

Activity 3

Practice the following tasks on your computer.

1. Create a new workbook. Type the text "3-Mar" in the cell A1 and apply the number format "Short Date".

2. Select the cell range from A1 to A6. Merge the selected cells and "Middle Align" the cell content.

3. Select the cell A1 and rotate the cell content to "Angle Clockwise".

4. Type "100" in cell B8. Apply the Number format "Currency" to cell B8, change the currency symbol to "SAR" and increase the decimal places to "3".

Session 16

CELLS GROUP AND EDITING GROUP OF THE HOME TAB

OBJECTIVES

General Objectives

In this Session you will learn about Cells Group and Editing Group of the Home Tab of Excel 2016.

Specific Objectives

At the end of this Session, you should be able to understand and practice:

- **The Home Tab**
 - Cells Group
  - Editing Group

LEARNING

THE HOME TAB

In the previous session, you learnt to apply different styles to the worksheet cells using the Styles group of the Home tab. In this session, you will learn about the Cells group and Editing group of the Home tab.

CELLS GROUP

The commands of the Cells group enable you to insert, delete and format cells, rows, columns or worksheets. This group contains the following commands:

A Insert: This command is used to add new cells, rows, columns and worksheets to your workbook.

B Delete: This command is used to remove cells, rows, columns and worksheets from your workbook.

C Format: This command is used to resize rows and columns as well as organize and protect your worksheets.
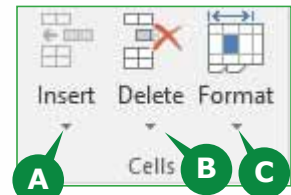
INSERTING ROWS

You can insert single or multiple rows wherever you want in a worksheet. The new row is inserted above the selected row in the worksheet.

To Insert a new row, follow the steps given below:

1 Select the row or a cell of the row above which you want to insert the new row.

2 Click on the arrow of the Insert command in the Cells group.

3 Click on Insert Sheet Rows option from the list.

A A new blank row is inserted above the selected row.

B Insert Options button appears to format the newly inserted row same as above or below row.

To insert multiple rows at a time, you need to select equal number of rows from the worksheet. For example, to insert three new rows, you need to select three rows from the worksheet before using the Insert command.

> **TIP**
>
> *To insert non-adjacent rows, hold down **Ctrl** key and select the desired non-adjacent rows. Click the **Insert** command to insert new rows.*
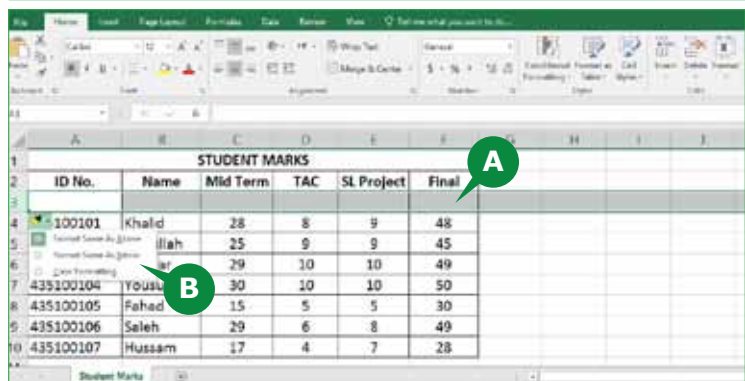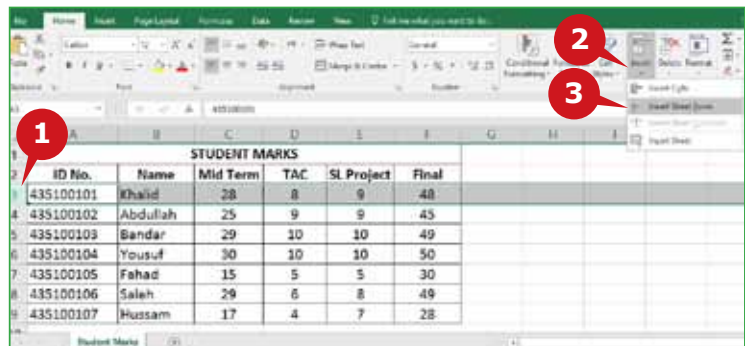
INSERTING COLUMNS

You can insert single or multiple columns wherever you want in a worksheet. The new column is inserted to the left of the selected column.

To Insert a new column, follow the steps given below:

1 Select the column or a cell of the column before which you want to insert the new column.

2 Click on the arrow of the Insert command in the Cells group.

3 Click on Insert Sheet Columns option from the list.

A A new blank column is inserted to the left of the selected column.

To insert multiple columns at a time, you need to select an equal number of columns from the worksheet before using the Insert command.

> **TIP**
>
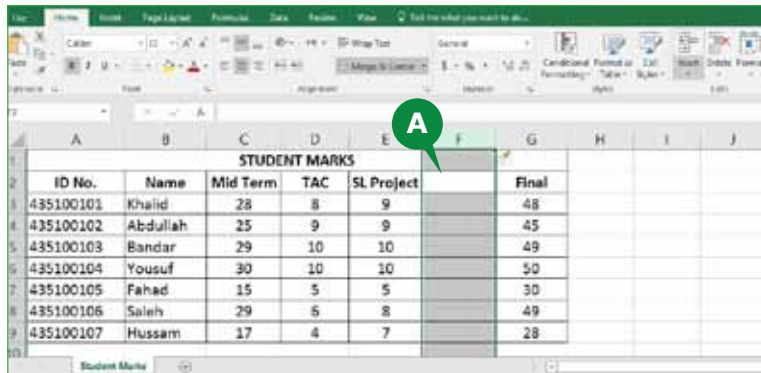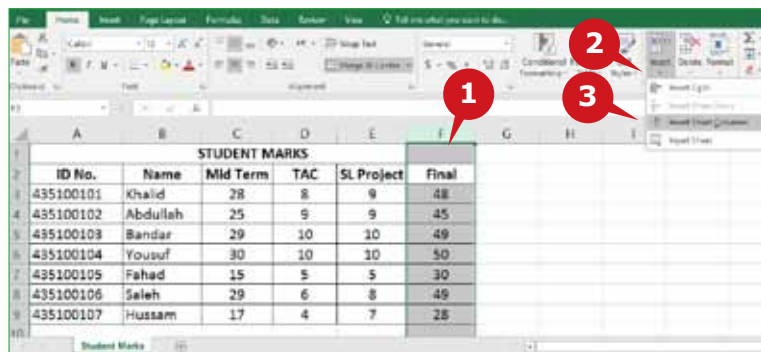> *To insert non-adjacent columns, hold down **Ctrl** key and select the desired non-adjacent columns. Click the **Insert** command to insert new columns.*

INSERTING AND SHIFTING CELLS

You can also insert single or multiple cells in a worksheet. For inserting multiple cells at a time, you need to select equal number of cells in the worksheet. The new cells are inserted to the left or above selected cells.

To insert cells, follow the steps given below:

1 Select a cell or range of cells where you want to insert new cells.

2 Click on the arrow of Insert command in the Cells group.

3 Click on Insert Cells option from the list.

A It opens the Insert Dialog Box to select an option to Shift cells right, Shift Cells down, insert Entire Row or Entire Column.

4 Click on the OK button.

B Excel inserts new cells in place of selected cells.
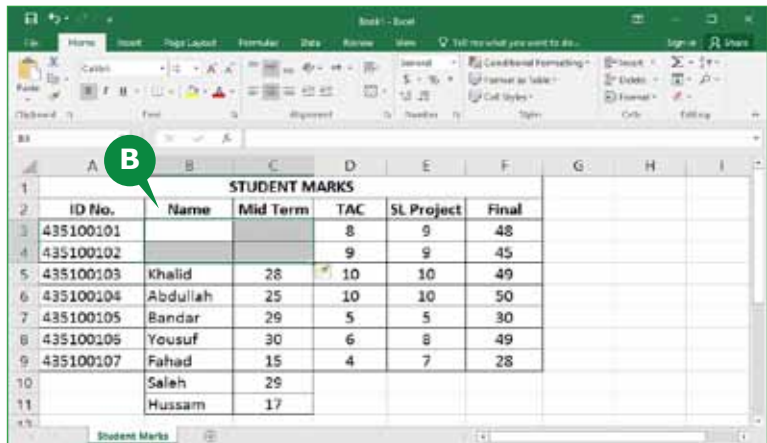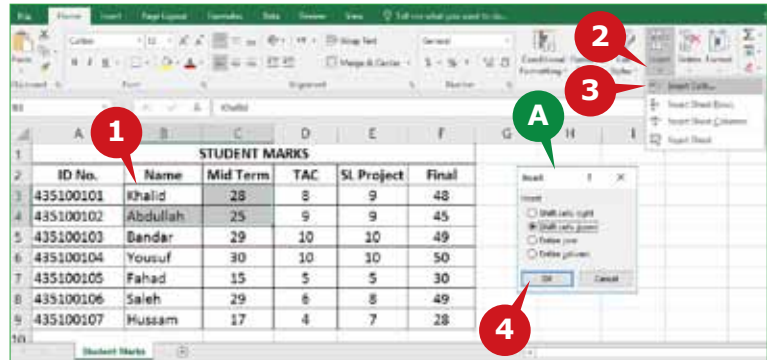
TIP

To quickly insert, right click on selected cells, rows or columns and select **insert** *option.*

DELETING CELLS, ROWS OR COLUMNS

You can delete single or multiple cells, rows and columns that you no longer need in your worksheet. You need to select the cells, rows or columns before using the Delete command.

To delete a row, follow the steps given below:

1 Select the row you want to delete.

2 Click on the arrow of Delete command in the Cells group.

3 Click on Delete Sheet Rows option.
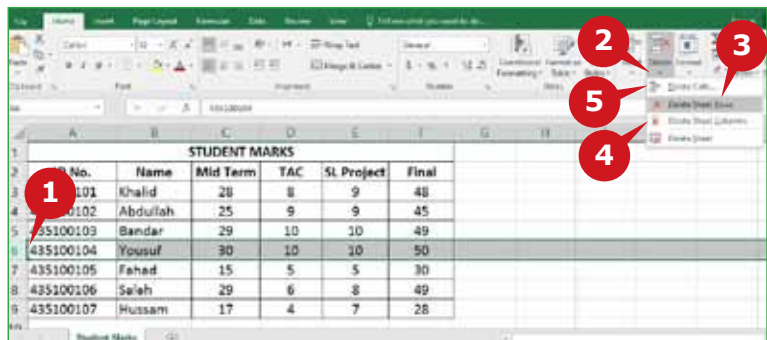
To delete a column:

4 Select the column and click on Delete Sheet Columns option from the Delete command.

To delete a cell:

5 Select the cell and click on Delete Cells option from the Delete command.

When you delete a cell or a range of cells, you can Shift cells left, Shift cells up, delete Entire row, or delete Entire column.

FORMAT ROWS AND COLUMNS

The Format command in the Cells group allows you to adjust the height and width of rows and columns in your worksheet. You can specify row height from **0 to 409** points and column width from **0 to 255** characters. The height of multiple rows or width of multiple columns can also be changed at the same time.

To change row height, follow the steps given below:

1 Select the row you want to resize.

2 Click on the arrow of Format command in the Cells group.

3 Click on Row Height option.

A It opens Row Height dialog box to enter the new row height.

4 Click on the OK button.

To change the column width:

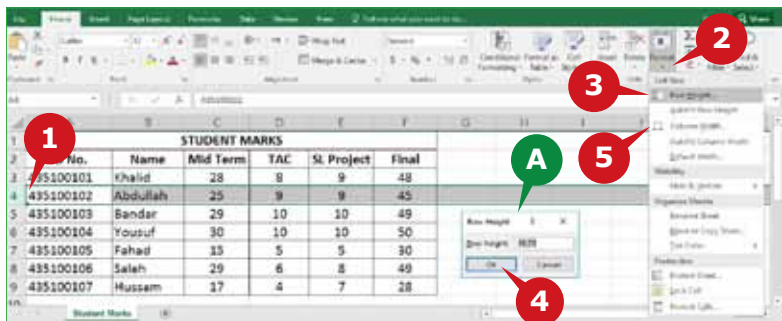**5** Select the column and click on Column Width option from the Format command. Specify the new column width and click on the OK button.

TIPS

To quickly set the row height or column width, right-click the selected rows or columns and choose the row height or Column Width option, type the value and then click the OK button.	*If the row height is zero (0), the row is hidden. Similarly, if the column width is zero (0), the column is hidden.*

EDITING GROUP

Excel 2016 helps you to perform calculations or analyze the data in the worksheet. The commands of Editing Group enable you to quickly calculate your data, generate series of numbers and text automatically, sort your data in an order or search for particular data. In this section you will learn to use the following commands:

A AutoSum: This Command is used to quickly calculate sum of data in contiguous cells.

B Fill: This Command is used to fill the selected cells with the contents of adjacent cells.

C Sort and Filter: This Command is used to organize your data in an order or filter out data to display only the specific data you want.
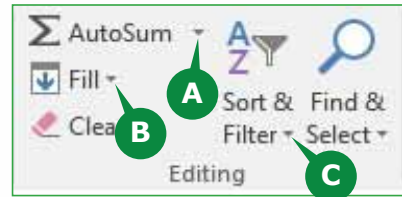
AUTOSUM

AutoSum is a built-in feature of Excel 2016 that allows you to quickly calculate sum of values without manually entering a formula. You can also calculate average, minimum or maximum values using dropdown menu of **AutoSum** command. To use AutoSum command, you need to select the blank cell next to the numbers in a row or a column. AutoSum will automatically sense the range to be calculated and builds the formula for you.

To use AutoSum, follow the steps given below:

1 Select the cell where you want to display the sum.

2 Click on the Auto Sum command in the Editing group.

3 Excel selects range of cells and displays the formula in the selected cell. Press the Enter Key.

A Sum is displayed in selected cell.
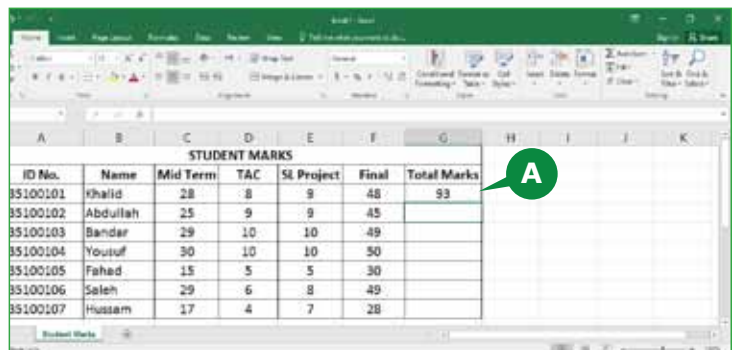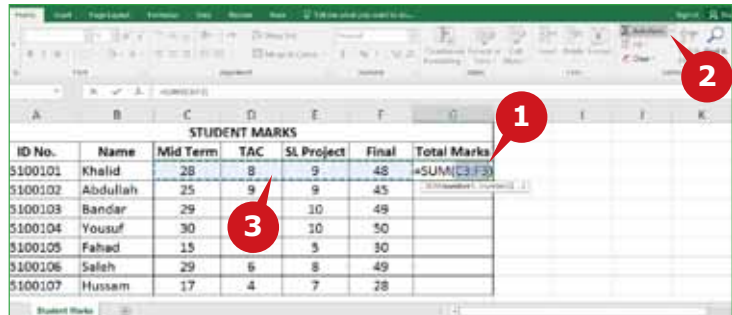
AUTOFILL FOR FASTER DATA CALCULATION

Excel's AutoFill feature is used to copy the contents or formula of a cell to the adjacent cells. While using AutoFill feature, you can use the **Fill handle,** which is a small square in the lower-right corner of the selected cells.

To use **AutoFill** feature, follow the steps given below:

1 Select the cell containing the formula you want to AutoFill.

2 Move the mouse pointer to the bottom right corner of the cell.

When mouse pointer changes to (+) sign, drag the Fill handle downwards to the last cell you want to fill.

A The Formula is copied and the results are shown in the cells.

OTHER USES OF AUTOFILL

Instead of entering data manually, the **AutoFill** feature also allows you to automatically fill a range of cells with data that follows a pattern, for example a series of numbers, dates, weekdays, months or years. To AutoFill a series of numbers, you need to enter numbers in at least two cells and select both cells.
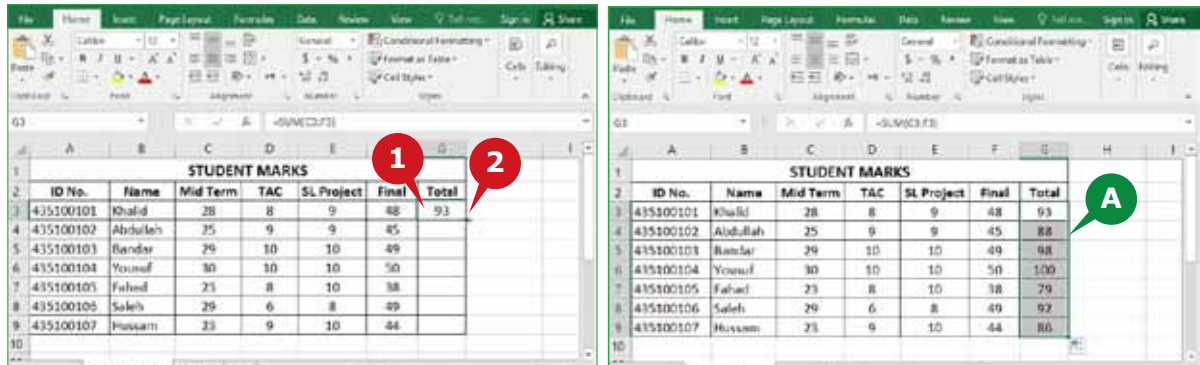
To AutoFill cells with Weekdays, follow the step given below:

1 Enter a weekday in a cell and drag the Fill handle downwards as far as you want to fill the cells.

A Weekdays are filled automatically.

To use AutoFill for generating a series of numbers, follow the step given below:

2 Enter the first two numbers of the series.

Select both cells and drag the Fill handle downwards as far as you want to fill the cells.

B Number series is filled automatically.
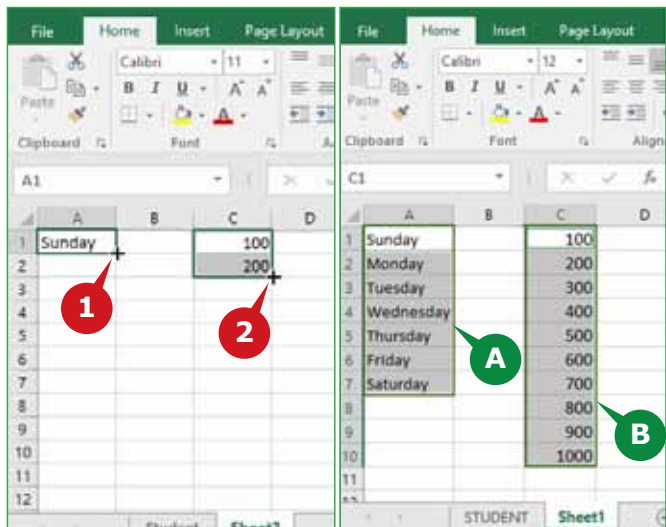
CREATING A FORMULA

Excel 2016 allows you to manually create formulas for calculations. A formula is an expression that performs calculations on data in the cells. A formula uses arithmetic operators like **+, -, *, /, %,** to perform addition, subtraction, multiplication, division and percentage respectively. In Excel 2016, a formula begins with an equal to **(=)** sign.

Session 16

To create a formula to multiply two numbers, follow the steps given below:

1 Select a cell where you want to display the result.

2 Type the formula starting with equal sign (=) followed by the Cell addresses you want to calculate with the (*) sign in between.

The formula will appear in the cell and in the formula bar. Press the Enter Key at the end.

A The result is displayed in the cell you selected.

TIP

*You can also manually create formulas to calculate the numbers directly. For example, when you type **=12+10** in a cell and press ENTER key, Excel calculates the result and displays **22** in that cell.*

USING FILL COMMAND

You can use the Fill command to fill the selected cells with the contents of an adjacent cell or range of cells.

To use the Fill command, follow the steps given below:

1 Select the Cell or Cell range where you want to copy the contents of adjacent cell or cell range.

2 Click on the arrow of Fill command in the Editing group.

3 Select Down, Right, Up or Left option to fill the selected cells.

A The selected cells are filled with the contents of adjacent cells.

TIP

You can also use the Fill command to fill a formula into adjacent range of cells. Select simultaneously, the cell with the formula and the adjacent cells you want to fill. Click the **Fill command** *and choose* **Down, Right, Up,** *or* **Left** *option.*

SORTING DATA

Sorting data is an integral part of data analysis. It allows you to arrange the data in an order to quickly visualize and understand it better. You can sort a list of names in an alphabetical order i.e. (A to Z or Z to A). Similarly, you can sort a list of numbers in Ascending order (Smallest to Largest) or Descending order (Largest to Smallest).

To sort a list of numbers in ascending order, follow the steps given below:

1. Select the first cell of the column you want to sort.
2. Click on the arrow of Sort & Filter command in the Editing group.
3. Select Sort Smallest to Largest option.
A. The data is sorted according to your selection and the accuracy with the other data is maintained.

FILTERING DATA

Filter command allows you to view specific rows in a worksheet, while hiding the other rows that do not meet the specified filtering criteria. When you apply Filter command, Filter Controls appear to the header cell of the columns. You can use the Filter Controls on a column to specify the criteria for filtering the data in the column.

To use the Filter command, follow the steps given below:

1 Click on the header cell of the column that you want to filter.

2 Click on the arrow of Sort & Filter command in the Editing group.

3 Select the Filter option.

A It will add Filter Control with a dropdown arrow to each column heading.

4 Click on the arrow of Filter control of the column you want to sort.

5 Click the check boxes according to the filtering criteria you want.

6 Click on the OK button.

B The data is filtered and you see only the information according to the filtering criteria.

ACTIVITIES

Activity **1**

Choose the correct option for the following statements.

1. A new row is inserted _____ the selected row in the worksheet.
   a. Below
   b. Right
   c. Above
   d. Left

2. The_____command is used to change the row height or column width.
   a. Insert
   b. Format
   c. Change
   d. Font Size

3. The_____ command is used to fill the selected cells with the contents of adjacent cells.
   a. Format
   b. AutoSum
   c. Fill
   d. Sort

4. _____feature allows you to arrange the data in an order, according to the contents of a column.
   a. Sort
   b. AutoFill
   c. Filter
   d. Format

Activity 2

Fill in the blanks with the appropriate words provided in the box.

Filter	Sort	Cells	AutoFill	AutoSum

1. _____ group enables you to insert, delete and format the rows or columns of worksheet.

2. The_____command is used to quickly add a range of numbers in a column or a row.

3. _____feature is used to generate a series of numbers, weekdays, months, etc.

4. _____ option temporarily hides unwanted data to show only the data you need.

Activity 3

Practice the following tasks on your computer.

1. Create a blank Workbook. Select the column range from A to E and increase the column width to 30.

2. Enter the data of 5 students under the column headings "ID Number", "Name", "Midterm marks", and "Final marks". Enter the column heading "Total marks" and calculate total marks for each student. (Hint: You can use AutoSum command.)

3. Generate name of the months starting from "January" to "December" in the cell range B10 to B21. (Hint: You can use AutoFill feature.)

4. Display only the details of the students who have a "Total mark" less than 50.
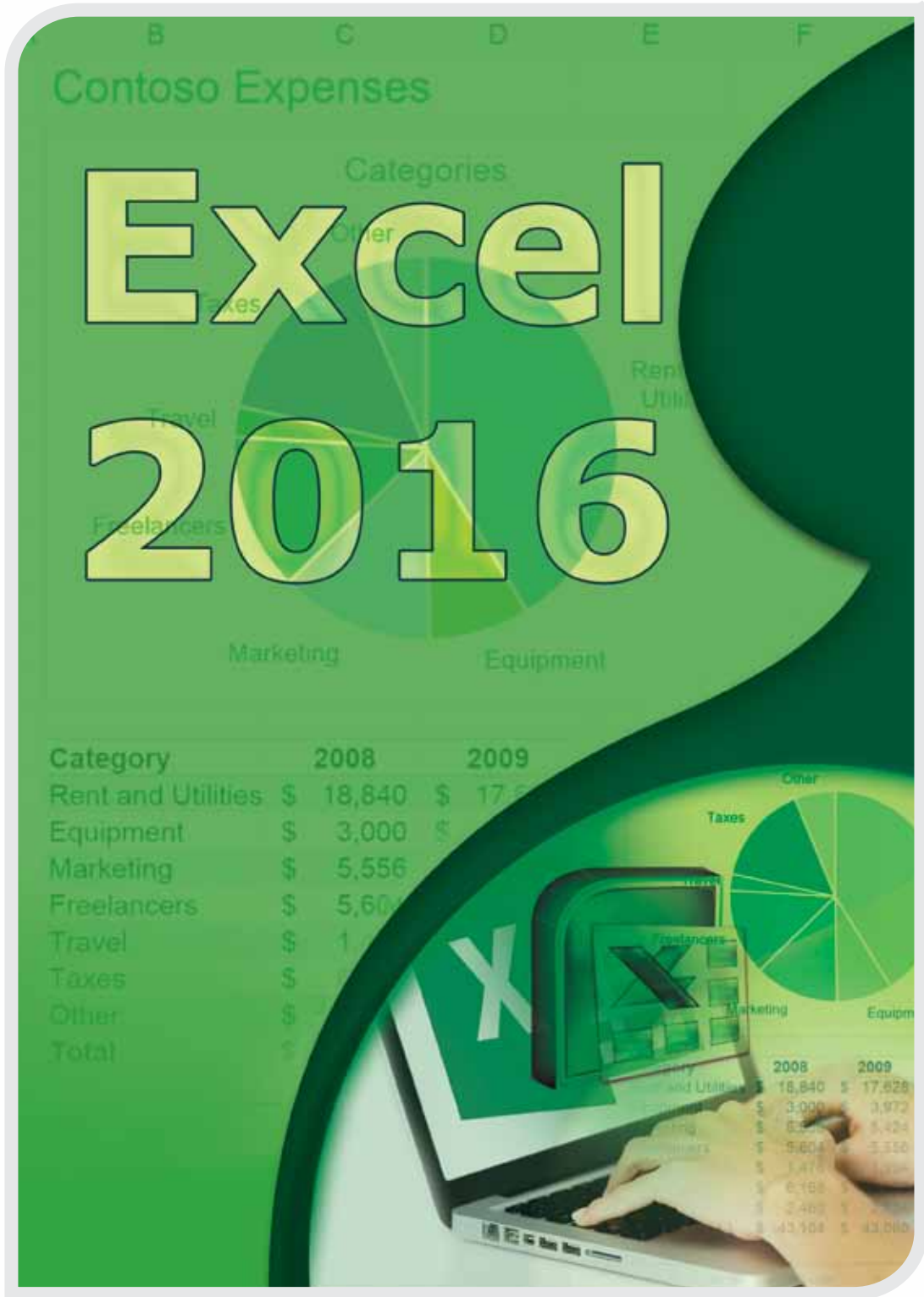
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Session 17

THE INSERT TAB AND THE PAGE LAYOUT TAB

OBJECTIVES

General Objectives

In this Session you will learn about Charts Group of the Insert Tab and Themes, Page Setup, and Sheet Options groups of the Page Layout Tab of Excel 2016.

Specific Objectives

At the end of this Session, you should be able to understand and practice:

- **The Insert Tab**
  - Charts Group

- **The Page Layout Tab**
  - Themes Group
  - Page Setup Group
  - Sheet Options Group

LEARNING

INSERT TAB

The Insert Tab enables you to insert Charts, Pictures, 3D Maps, Links, etc. in your worksheet. In the following section, you will learn to create and format Charts in Excel 2016 that help you to visualize worksheet data graphically.

CHARTS GROUP

Charts feature is one of the most powerful and easy-to-use feature of Excel 2016. The different chart types that are available in Charts group include: Column Chart, Line Chart, Pie Chart, Bar Chart, Waterfall Chart, etc.
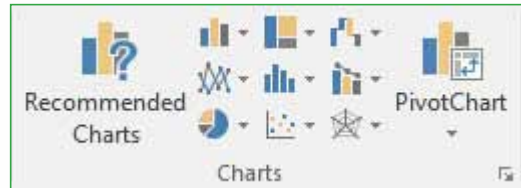
WHAT IS A CHART?

A Chart is a graphical representation of data, used to communicate information in an easy to understand and attractive manner. Charts are especially helpful to illustrate the workbook data graphically, which makes it easy to visualize comparisons. In an Excel 2016 chart, the data series is represented by data points, such as columns in a column chart, bars in a bar chart or lines in a line chart.

ELEMENTS OF A CHART

A chart is comprised of various chart elements. The chart elements can be edited or formatted to make the chart descriptive, meaningful and appealing. Some of the chart elements are displayed by default; others can be added as needed.

A Chart Area: It is the entire area of the chart, which encompasses all the chart elements.

B Plot Area: The actual chart area where the data is graphically plotted in the chart.

C Chart Title: It is the title that gives an idea about the contents of the chart.

D Data Points: They represent the data series that are plotted in the chart.

E Primary Vertical Axis Title: It is the title of vertical (value) axis.
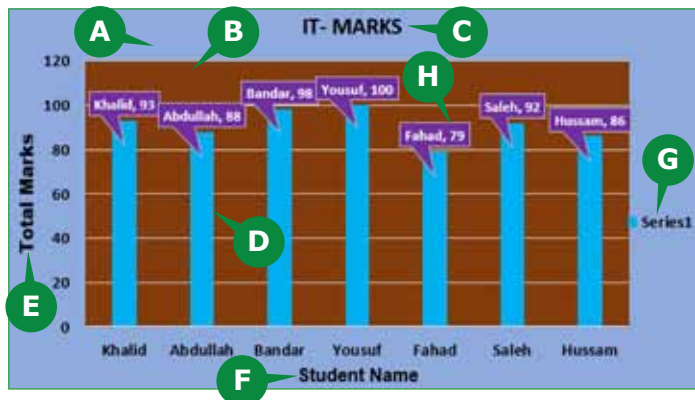
F Primary Horizontal Axis Title: It is the title of horizontal (category) axis.

G Legend: It shows which color represents what data in the chart.

H Data Labels: Help you to identify the details of the data on the chart itself.

INSERTING A CHART

You can create a chart for the data you have arranged in rows or columns in a worksheet. As mentioned, there are several chart types available in Excel 2016, you have to choose the one that best suits to your data. For example, Column chart is used to compare values across a few categories. It displays categories along the horizontal axis and values along the vertical axis.

To insert a column chart, follow the steps given below:

1 Select the columns or rows containing data that you want to plot in the chart.

2 Click on the Insert Column or Bar Chart command in the Charts group.

3 Select a suitable column chart from the displayed list of charts.

A Selected Chart type is inserted.

B Chart buttons appear.

C Chart tools appear.
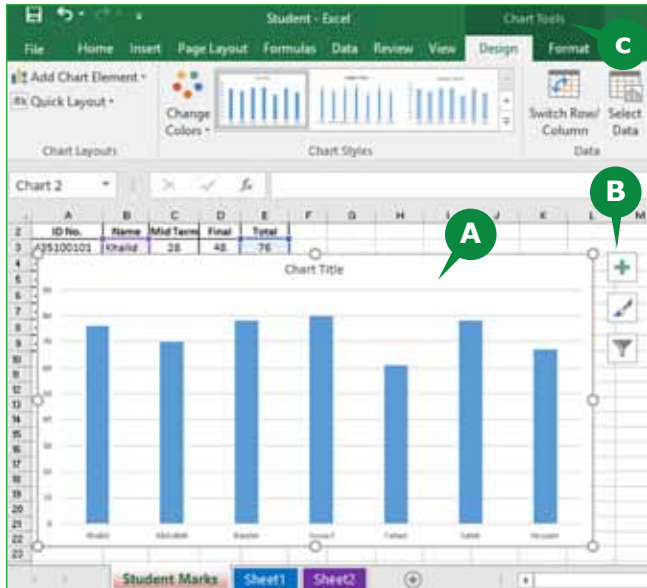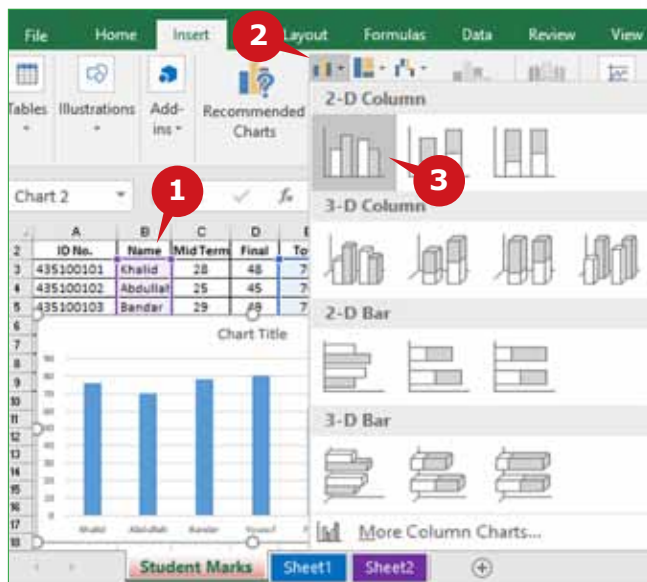
TIP

If you are not sure which type of chart to use, the **Recommended Charts** *command in the* **Charts** *group will suggest several charts based on your selected data.*

CONTEXTUAL TABS- DESIGN & FORMAT

When you insert a chart, two new contextual tabs, Design tab and the Format tab, appear on the ribbon with the title Chart Tools.

A The Contextual Design Tab: This tab enables you to add chart elements, change chart styles, colors and change chart data. It also enables you to Move a Chart or change Chart Types.

B The Contextual Format Tab: This tab enables you to format different elements of a chart by applying shape styles, shape effects, or fill colors. It also enables you to draw different shapes on the chart and apply different WordArt Styles to chart titles.
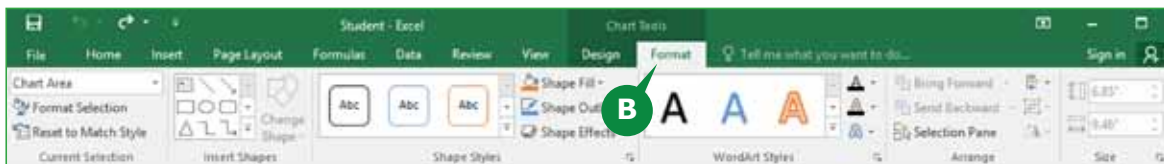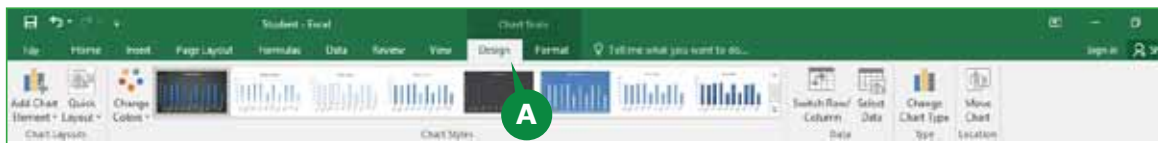
CHART BUTTONS

Chart Buttons enable you to quickly format the inserted chart. They appear to the upper right corner of the chart. When you select the chart, Excel 2016 provides you with the following Chart buttons.

A Chart Elements Button:
This button is used to add, remove and change chart eleme-nts such as Title, Axis, Legend, Gridlines etc.

B Chart Styles Button: This button is used to set a style or color scheme for the chart.

C Chart Filters Button: This button is used to select the data points to be visible on your chart.

MOVING A CHART

When you insert a new chart, it is placed on the same worksheet that contains its source data. The Move Chart command enables you to move the chart to a new sheet or as an object to any existing worksheet. It helps you to keep your workbook organized.

To move a chart, select it and follow the steps given below:

1. In the contextual Design tab from the Location group, click on the Move Chart command.
A. It displays Move Chart dialog box.
2. In the dialog box, select New sheet option to move the chart in a chart sheet and type the chart sheet name.
B. Use the Object in box if you want to move the chart to an existing worksheet.
3. Click on the OK button.
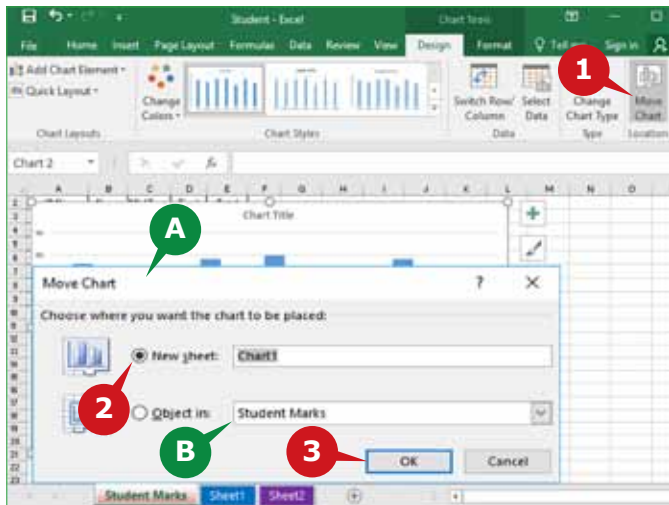
CHART STYLES

Excel 2016 provides a variety of useful predefined chart styles and colors to customize the visual style of the chart.

To apply a Chart Style, select the chart and follow the steps given below:

1. In the contextual Design tab from the Chart Styles group, click on the More Drop Down Arrow.
2. Select a suitable chart style.
A. Selected style is applied to the chart.

TIP

You can also change the background color and shape style for the chart from Shape Styles group of the contextual Format Tab.

CHART TITLE

To make a chart easier to understand, you can add a chart title. The Add Chart Element command helps you to add, remove or change chart elements such as Chart Title, Axes, Data Labels, etc.

To insert a Chart Title, select the chart and follow the steps given below:

1. In the Chart Layouts group of contextual Design tab, click on the Add Chart Element command.
2. Point to Chart Title option.
3. Select Above Chart option.
4. Type the Chart Title.

TIP

You can add, show or hide chart elements using the check boxes that appear when you click on the Chart Elements button.

AXIS TITLES

Axis Titles help you to clarify the information in your chart. Charts usually have two axes that are used to measure and categorize the data. A Column Chart typically displays the categories along the Horizontal (category) Axis and the values along the Vertical (value) Axis.

To add Axis Titles, select the chart and follow the steps given below:

1. In the Chart Layouts group of contextual Design tab, Click on the Add Chart Element command.
2. Point to the Axis Titles option.
3. Select the desired Axis (Primary Horizontal or Primary Vertical)
4. Type the suitable axis titles.

TIP

You cannot add Axis Titles to charts that do not have Axis **(Pie or Doughnut charts).**

DATA LABELS

Data Labels make a chart easier to understand by showing the actual data values on its individual data points. Data Labels help you to quickly identify variations in a data series of the chart. By default, the data labels are linked to values in the worksheet, and gets updated automatically when the values are changed.

To show Data Labels on a chart, select the chart and follow the steps given below:

1 In the contextual Design Tab from the Chart Layouts group, click on the Add Chart Element command.

2 Point to Data Labels options.

3 Select a suitable Data Label position from the list that appears.

A Data Labels are displayed on the chart.

CHANGING CHART DATA

After you create a chart, you may need to add, change or remove its source data in the worksheet. The Select Data command enables you to change the source data (data range) to be included in the chart.

To change the Chart Data, select the chart and follow the steps given below:

1 Click on the Select Data command in the Data group of the contextual Design tab.
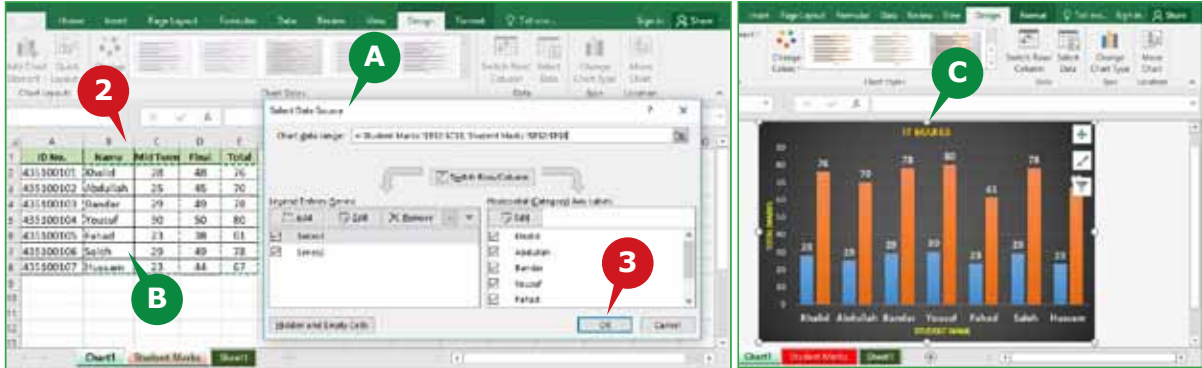
A The Select Data Source dialog box appears.

B Worksheet containing source data appears.

2 Select the new data range from the worksheet that you want to include in the chart.

3 Click on the OK button.

C The Chart is updated with the new source data.

CHANGING CHART TYPE

If your data is not well suited to a certain Chart Type, you can switch to a different Chart Type. Change Chart Type command enables you to change your existing chart to a different Chart Type. For example, you can change a Column Chart to a Bar Chart.

To change the Chart Type, select the chart and follow the steps given below:

1 Click on the Change Chart Type command in the Type group of contextual Design tab.

A Change Chart Type dialog box appears.

2 In the All Charts tab of the dialog box, select a suitable Chart Type in the left pane.

3 In the right pane of the dialog box, select the chart Sub-type.

4 Click on the OK button.

B The Chart is changed to selected Chart Type.
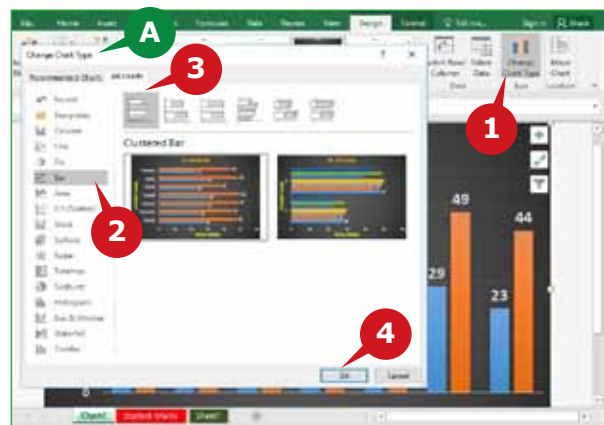
PRINT A CHART

You may print the chart along with the data on the worksheet in the normal way. You can also quickly print a chart without the worksheet data.

To Print a selected chart, follow the steps given below:

1 Click on the Print option in the File Tab Backstage view.

A The Print Selected Chart option is selected in the Settings dropdown menu.

B Print preview of the chart appears.

2 Click on the Print button.

PAGE LAYOUT TAB

The Page Layout tab allows you to customize the way your worksheets are set up into different pages. It helps you to change the Theme, Page Size, Margins, Print Area, and more.

THEMES GROUP

The Themes group commands enable you to format the entire workbook to give it a professional and modern look by applying a theme, theme colors, theme fonts and theme effects.
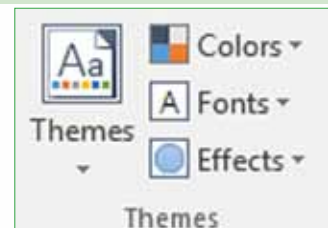
APPLYING THEMES

A theme is a unique set of formatting characteristics that includes colors, fonts and effects. Themes command is used to apply a theme from several predefined Excel 2016 themes to give your workbook a style instantly. The selected theme is applied to all the worksheets in the workbook.

To apply a Theme, follow the steps given below:

1 Click on the Themes command in the Themes group.

2 Select a suitable Theme from the themes gallery.

A Selected theme is applied and the entire look of the workbook is changed instantly.
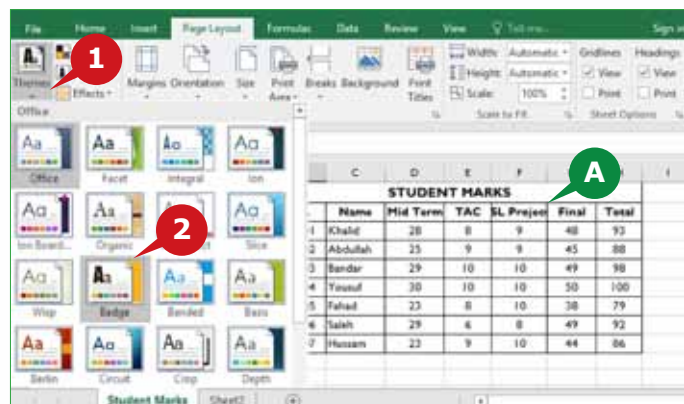
PAGE SETUP GROUP

The Page Setup group has some common page setup commands such as Page Margins, Orientation, and Size. It also has some special commands such as Print Area, Background, and Print Titles that you will learn in the following section.

SET PRINT AREA

A print area is a range of cells that you select to print when you do not want to print the entire data of the worksheet. The Print Area command enables you to select only the area of the worksheet you need to print.

You can also remove the selected print area using the Clear Print Area option of the Print Area command.

To set Print Area, follow the steps given below:

1. Select the area that you want to set as print area.

2. Click on the Print Area command in the Page Setup group.

3. Select the Set Print Area option.

To Clear Print Area,

4. Select the Clear Print Area option of the Print Area command.
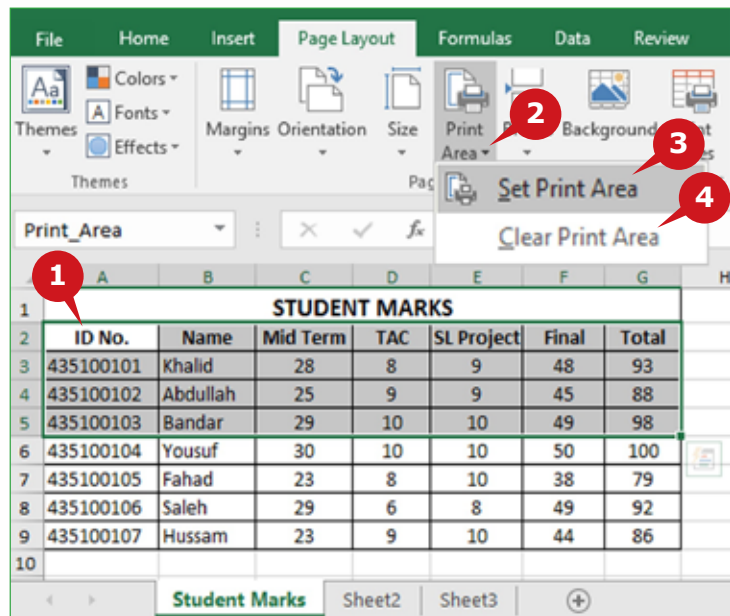
TIP

*You can select multiple print areas by holding down **Ctrl key** before using the Set Print Area command. Each Print Area will print as a separate page.*

WORKSHEET BACKGROUND

The Background command enables you to insert a picture as worksheet background. You can browse your computer for the background picture or search for online pictures using Microsoft Bing Search box. The worksheet background picture is used for display purpose only and is not printed.

To insert a picture as worksheet background, follow the steps given below:

1 Click on the Background command in the Page Setup group.

A The Insert Pictures dialog box appears.

2 In the dialog box, click on Browse to select the picture on your computer.

B Use the Bing Image Search box if you want to search for online pictures.

3 Browse and select the picture in the Sheet Background dialog box.

4 Click on the Insert button.

C Selected picture is inserted as worksheet background.
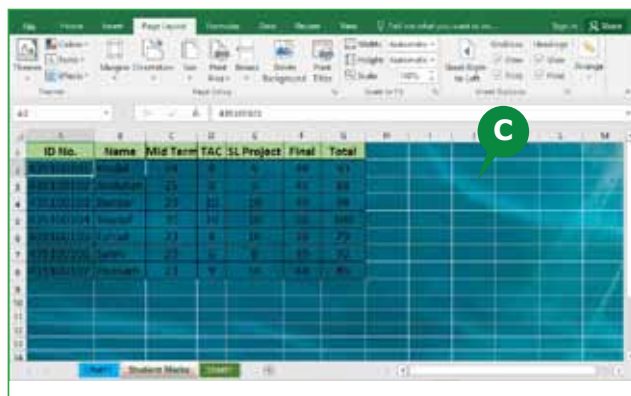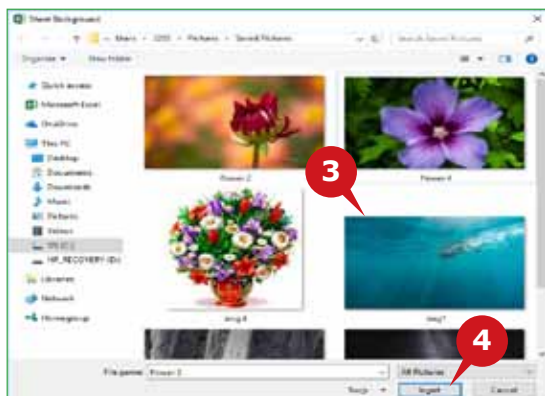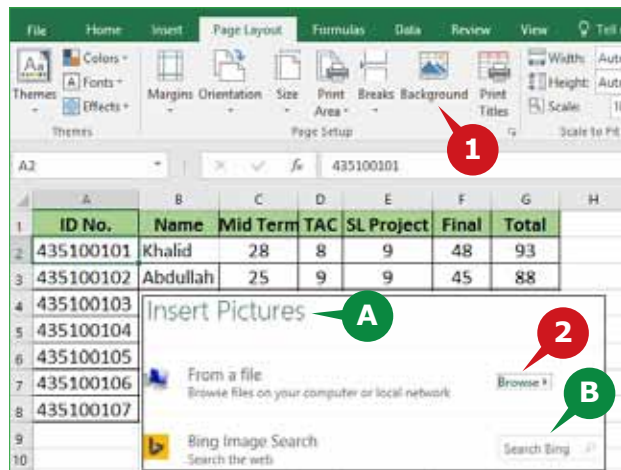
PRINT TITLES

You can use Print Titles command to specify the rows to be printed at the top or columns to be printed at the left of each page. For example, you can print the header row on all pages when you have a large worksheet to print, so the readers don't have to go back to the first printed page to see the headers.

To set Print Titles, follow the steps given below:

1 Click on the Print Titles command in the Page Setup group.

A Page Setup dialog box appears.

2 Click in the Rows to repeat at top box under Sheet tab of the dialog box.
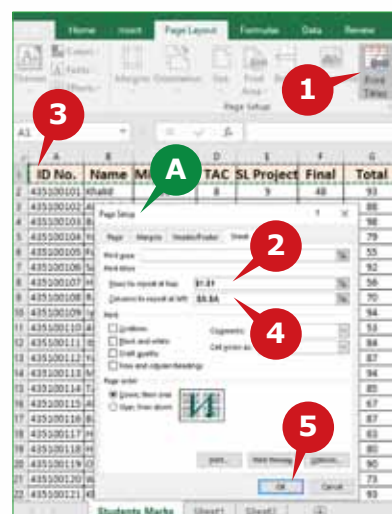
3 Select the Row that you want to print on every page.

4 Similarly, click in the Column to repeat at left box and select the column that you want to print on every page.

5 Click on the OK button

TIP

You can also click on **Collapse Dialog button**   *at the right end of the* **Rows to repeat at top** *and* **Columns to repeat at left** *boxes, to minimize the dialog box and then select the title rows or columns that you want to print on every page.*

SHEET OPTIONS GROUP

The commands of **Sheet Options** group allow you to change the Sheet Direction, show/hide/print the Gridlines and Headings of columns and rows.
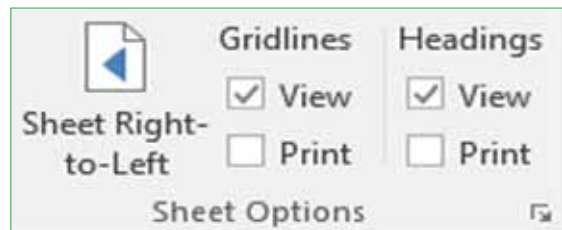
SHEET RIGHT-TO-LEFT

If the column & row headings start from top left of the worksheet and you want to change the sheet direction from right to left, you can use the **Sheet Right-to-Left** command.

To change the sheet direction,

1 Click on the Sheet Right-to-Left command in the Sheet Options group.

A Sheet direction is changed from right to left.
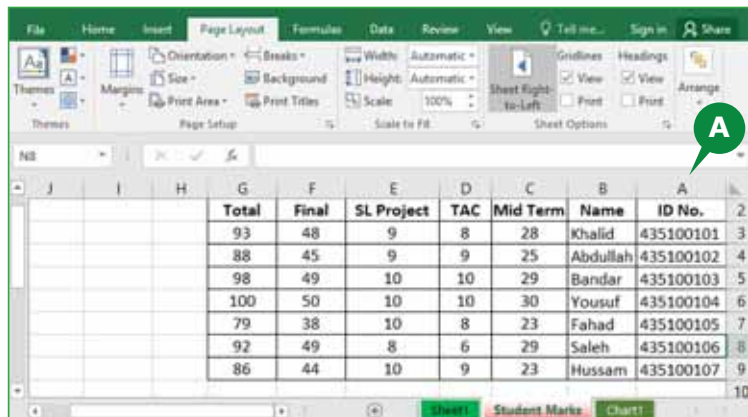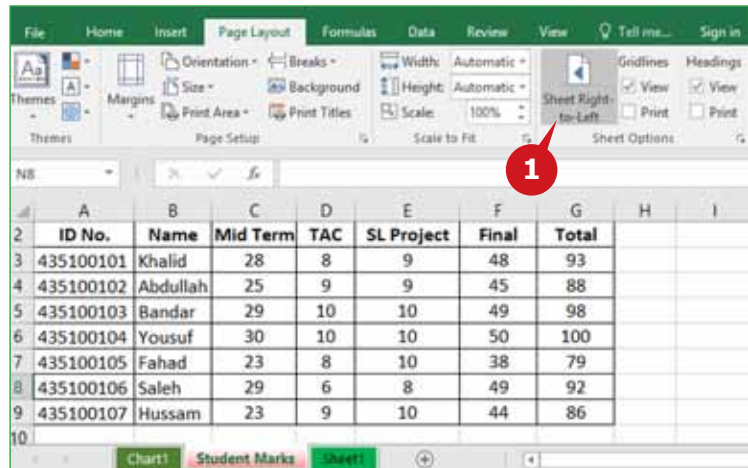
HIDE GRIDLINES AND HEADINGS OF COLUMNS & ROWS

Gridlines are the faded lines that appear around the cells to distinguish them on the worksheet. By default, Gridlines appear in the entire workbook. Similarly, the column headings (A, B, C, etc.) or row headings (1, 2, 3, etc.) are also displayed, by default. You can hide these Gridlines and Headings of rows and columns, if you want.

To hide Gridlines,

1. Uncheck the View check box under Gridlines in the Sheet Options group.

A. Gridlines are disappeared.

To hide Headings of columns and rows,

2. Uncheck the View check box under Headings in the Sheet Options group.

B. Column headings are hidden.

C. Row headings are hidden.
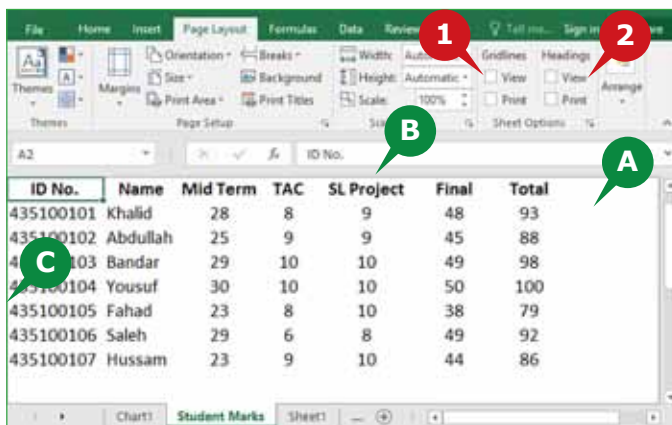
PRINT GRIDLINES AND HEADINGS

By default, Excel 2016 does not print the Gridlines and the Headings of columns and rows that you see on screen. You can specify to print the Gridlines or Headings from Sheet Options group.

To print Gridlines,

1. Check the Print check box under Gridlines in the Sheet Options group.

To print Headings,

2. Check the Print check box under Headings in the Sheet Options group.
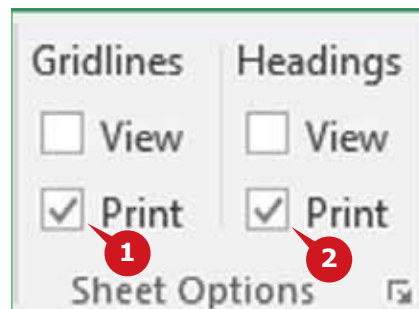
ACTIVITIES

Activity   **1**

Choose the correct option for the following statements.

1. The_____ is used to visualize workbook data graphically.

   a. Row

   b. Cell

   c. Chart

   d. Table

2. The _____ is used to identify the chart name and usually displayed above the chart.

   a. Legend

   b. Chart Title

   c. Chart label

   d. Data Points

3. A _____is a unique set of formatting characteristics that changes the look of your workbook.

   a. Print Area

   b. Background

   c. Chart

   d. Theme

4. A _____ is a ranges of cells that you select to print when you don't want to print the entire worksheet.

   a. Margins

   b. Orientation

   c. Print Area

   d. Print Titles

Activity 2

Fill in the blanks with the appropriate words provided in the box.

Legend	Background	Print Area	Print Titles	Data Labels

1. _____ are used to show actual data values of the data series in a chart.

2. _____ is a part of chart that describes the meaning of colors and patterns used in the chart.

3. The _____ command enables you to insert a picture behind the contents of a worksheet.

4. _____ feature is used to print the header row at the top of each page.

Activity 3

Practice the following tasks on your computer.

1. Create a blank Workbook. Enter the data of 5 students under the column headings "ID Number", "Name", "Marks" in the cell range A1 to C6. Apply the theme "Main Event".

2. Insert a Column Chart for the data of "Name" and "Marks" fields. Move the chart to new sheet and name it as "Students Marks".

3. Change the chart type to "Bar Chart" and show the data labels at "Outside End".

4. Set the print area from the cell range A1 to C6.

THE FORMULAS TAB
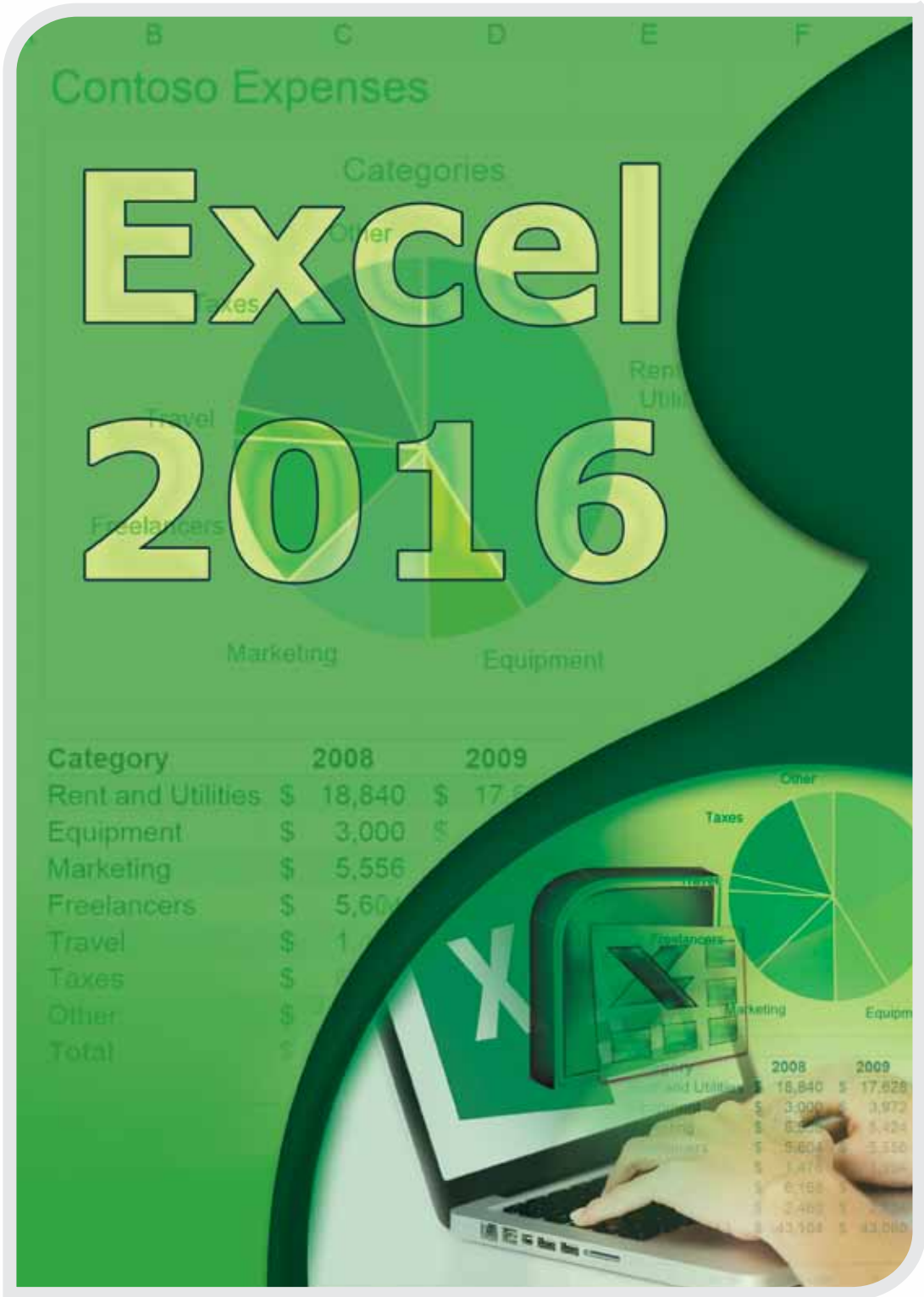
Session 18

OBJECTIVES

General Objectives

In this Session, you will learn about Function Library group of the Formulas Tab of Excel 2016.

Specific Objectives

At the end of this Session, you should be able to understand and practice:

- **The Formulas Tab**
  - Function Library group

LEARNING

FORMULAS TAB

The Formulas Tab allows you to calculate data using a variety of functions available in Excel 2016. In this session, you will learn about the Function Library group that contains built-in functions, which simplify various complex calculations.

FUNCTION LIBRARY GROUP

Excel 2016 provides a number of built-in functions to perform mathematical, statistical, logical or other operations easily. Function Library group contains various functions grouped in different categories such as Financial, Logical, Text, Date & Time and Math & Trig, to help you find the suitable function. You will learn some basic functions of Excel 2016 from the following categories.
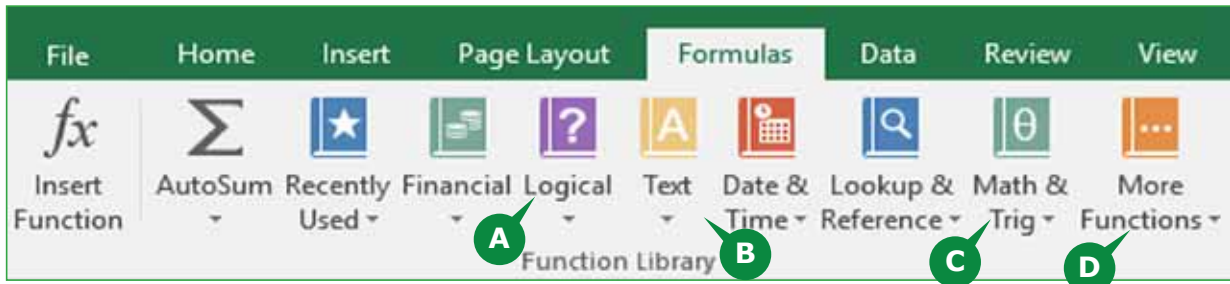
A Logical: Logical Functions are used to test for a condition to evaluate it as true or false. It includes functions such as AND, FALSE, IF, NOT, OR, TRUE, etc.

B Text: Text functions are used to manipulate text strings. It includes functions such as CHAR, LEN, LOWER, PROPER, TEXT, UPPER, etc.

C Math and Trig: These functions perform arithmetic operations, conditional sum, exponents & logarithms, and the trigonometric calculations.

It includes the functions such as SUM, SUMIF, LOG, COS, SIN, etc.

D More Functions: It includes Statistical and Engineering functions such as AVERAGE, COUNT, MAX, MIN, CONVERT, DELTA, etc.

TIP

To access all available functions, you can also use the Insert Function command of Function Library group or you can use the Insert Function button (fx) available to the left of the formula bar.

WHAT IS A FUNCTION?

A Function in Excel 2016 is a preset or inbuilt formula that performs calculations automatically. Each function has a specific **syntax**, i.e. a set of rules associated with it. In order to use a function correctly, you need to understand its syntax. The general syntax of a function is as follows:

=Function Name(argument list)

Example: = SUM(number1, [number2], ...)

A Function has an Equal Sign **(=)**, **Function name** and **Argument list**, which is enclosed within parentheses. Arguments are the values (e.g., 10, abc) or cell references (e.g., D5, B2:B8) supplied to the function. Some arguments are mandatory (required), whereas some are optional.

THE SUM FUNCTION

The SUM function calculates the sum of values contained in a range of cells.
Syntax:
 =SUM(number1, [number2],....)

To use the SUM function, select the cell to display the result, and follow the steps given below:

1 Click on the Math & Trig category in the Function Library group.

2 Select the SUM function from the displayed list of functions.

A Function Arguments dialog box appears.

3 In the Number 1 box, enter the cell range you want to sum or select the cell range from the worksheet.

4 Click on the OK button.

B The Sum value is displayed in the selected cell.

C The SUM function appears in the Formula bar.
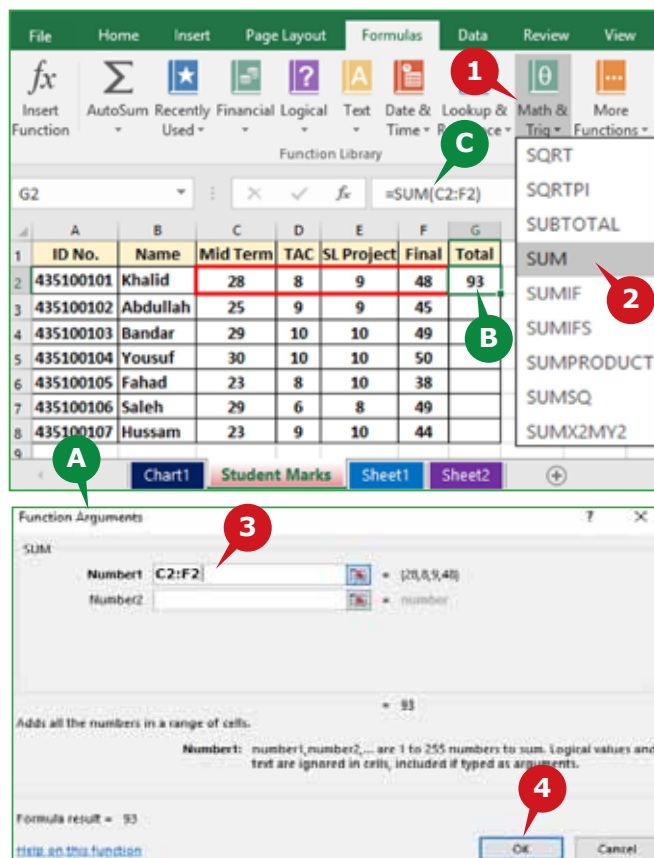
THE AVERAGE FUNCTION

The AVERAGE function is used to calculate the average of the values contained in a range of cells. It calculates the sum of the specified values and then divides the sum by the count of those values.

Syntax:
=AVERAGE(number1, [number2], ...)

To use the AVERAGE function, select the cell to display the result, and follow the steps given below:

1 Click on the More Functions category in the Function Library group.

2 Point to the Statistical option and select the AVERAGE function from the displayed list of functions.

3 In the Number 1 box, enter the cell range for which you want to calculate average, or select the cell range from the worksheet.

4 Click on the OK button.

A Average value is displayed in the selected cell.

B The Average Function appears in the Formula bar.
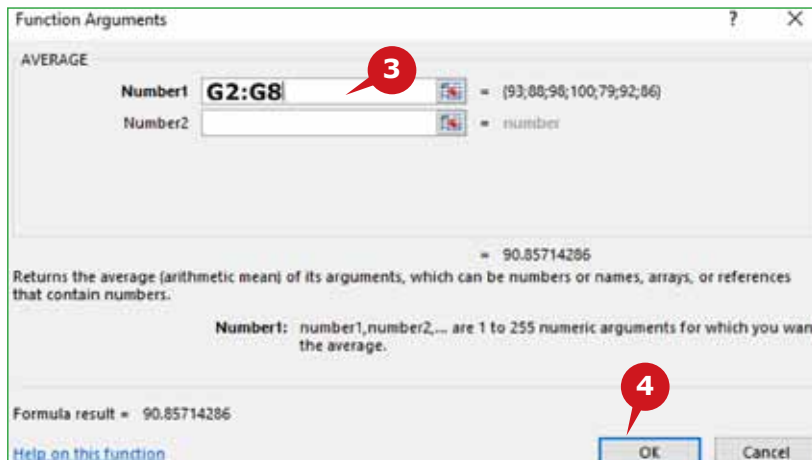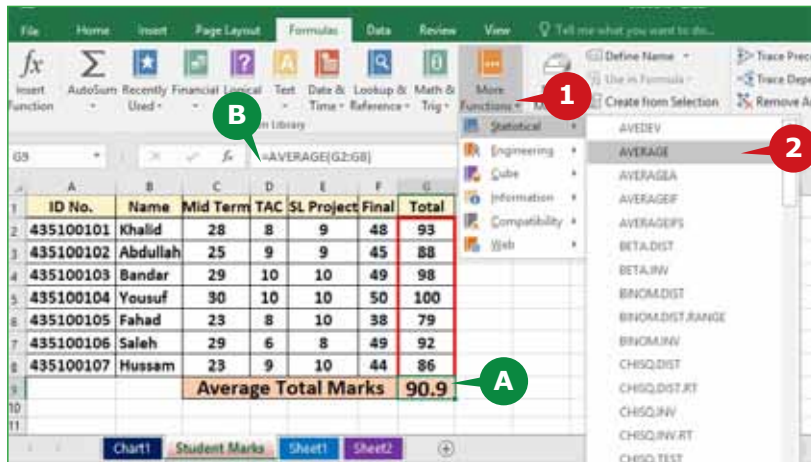
THE COUNT & COUNTA FUNCTIONS

The COUNT function counts the number of cells in a range that contain numbers only.

Syntax:

=COUNT(Value1, [Value2], ……)

The COUNTA function counts the number of cells in a range that are not empty i.e. it counts cells with text and numbers but does not count empty cells.

Syntax:

=COUNTA(Value1, [Value2], ……)

To use the COUNT function, select the cell to display the result, and follow the steps given below:

1. Click on the More Functions category in the Function Library group.

2. Point to the Statistical option and select the COUNT function from the displayed list of functions.

3. In the Value 1 box, enter or select the cell range you want to count from the worksheet.

4. Click on the OK button.

A. The cells containing numbers are counted. Similarly, to use the COUNTA function,

5. Choose the COUNTA function from the displayed list of Statistical functions.

- Follow the steps 3 & 4 mentioned above

B. The non-empty cells are counted.
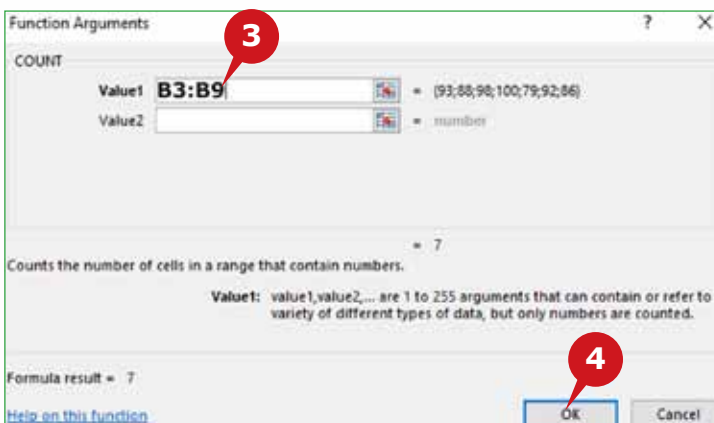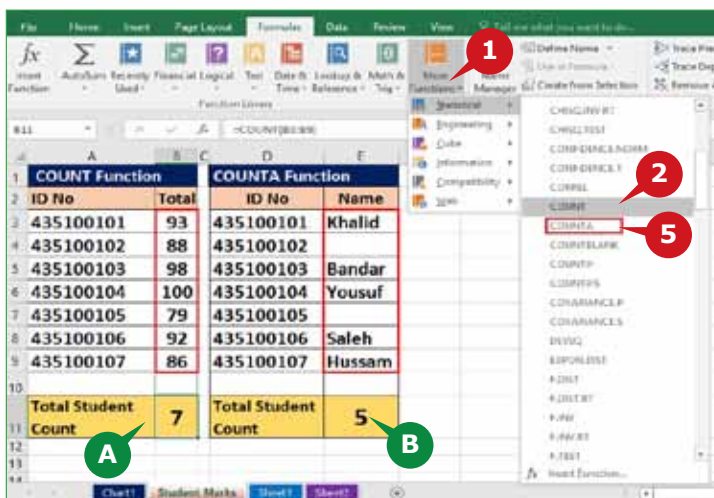
THE MAX AND MIN FUNCTIONS

The MAX function is used to calculate the largest or maximum value in the selected range of cells.

Syntax:

=MAX(number1, [number2], ...)

The MIN function is used to calculate the smallest or minimum value in the selected range of cells.

Syntax:

=MIN(number1, [number2], ...

To use the MAX function, select the cell to display the result, and follow the steps given below:

1 Click on the More Functions category in the Function Library group.

2 Point to the Statistical option and select the MAX function from the displayed list of functions.

3 In the Number 1 box, enter or select the cell range from the worksheet.

4 Click on the OK button.

A Maximum value is displayed in the selected cell.
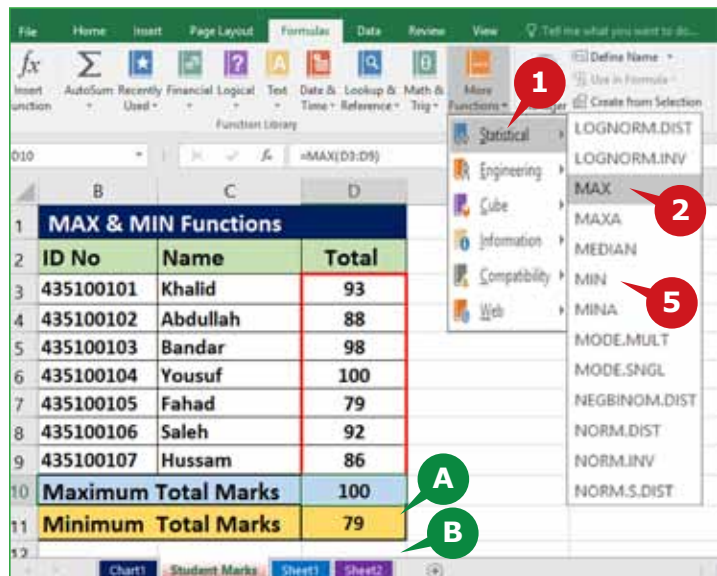
Similarly, to use the MIN function,

5 Choose the MIN function from the displayed list of Statistical functions.

• Follow the steps 3 & 4 as mentioned above.

B Minimum value is displayed in the selected cell.

THE LOWER & UPPER FUNCTIONS

The LOWER function is used to convert the text to lowercase i.e. small letters.

Syntax:
 =LOWER(Text)

The UPPER function is used to convert the text to uppercase, i.e. capital letters.

Syntax:
=UPPER(Text)

To use the LOWER function, select the cell to display the result and follow the steps given below:

1 Click on the Text category in the Function Library group.

2 Select the LOWER function from the displayed list of Text functions.

3 In the Text box of Function Arguments dialog box, enter the cell address containing the text string you want to convert or select the cell from the worksheet.

4 Click on the OK button.

A The text is converted to lower case.

Similarly, to use the UPPER function,

5 Choose the UPPER function from the displayed list of Text functions.

• Follow the steps 3 & 4 as mentioned above.

B The text is converted to upper case.
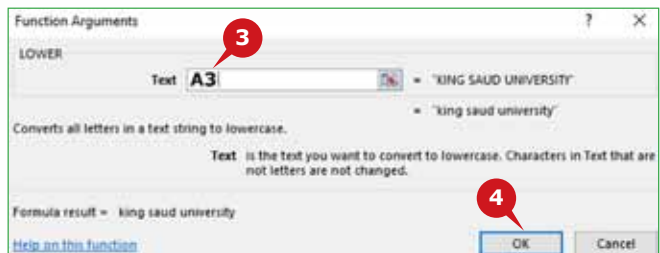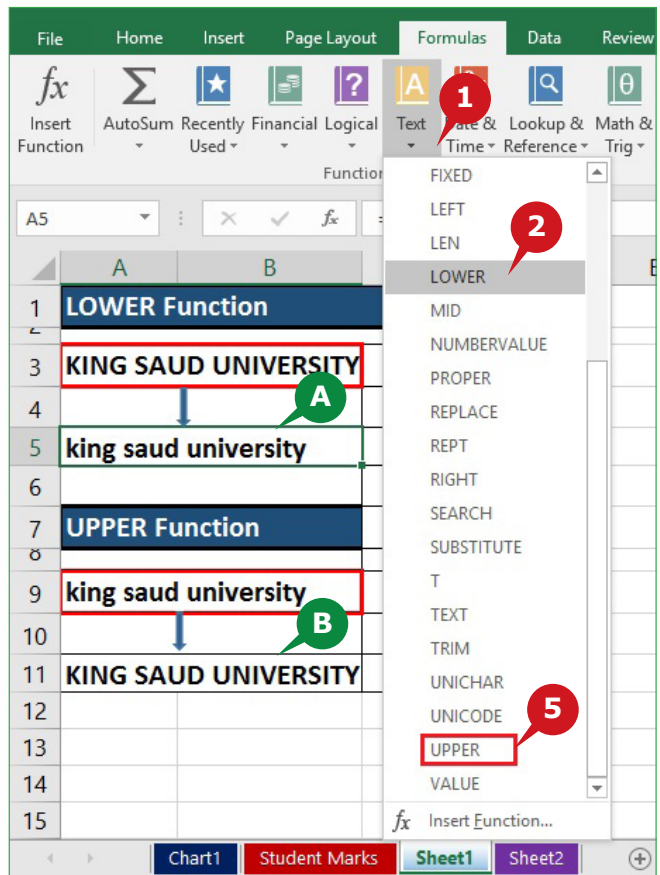
THE LEN & PROPER FUNCTIONS

The LEN function is used to calculate the number of characters in a text string including spaces.

Syntax:

=LEN(Text)

The PROPER function capitalizes the first letter of each word of a text string and changes all other letters to lowercase.

Syntax:

=PROPER(Text)

To use the LEN function, select the cell to display the result and follow the steps given below:

1 Click on the Text function category in the Function Library group.
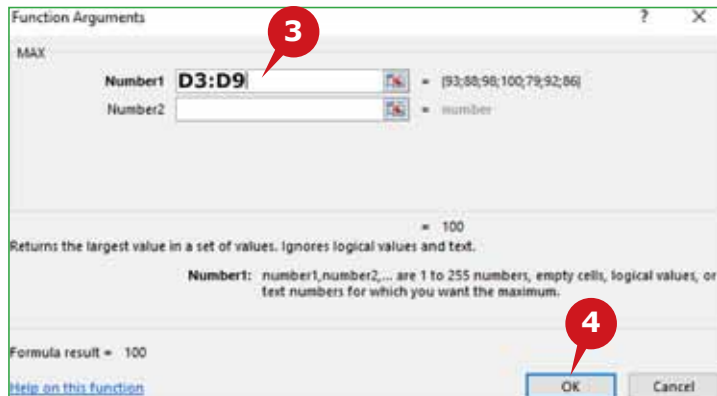
2 Select the LEN function from the displayed list of Text functions.

3 In the Text box of Function Arguments dialog box, enter or select the cell containing the text string from the worksheet.

4 Click on the OK button.

A The length of the text string is displayed.

Similarly, to use the PROPER function,

5 Choose the PROPER function from the displayed list of Text functions.

• Follow the steps 3 & 4 as mentioned above.

B The Proper case is applied to the text string.
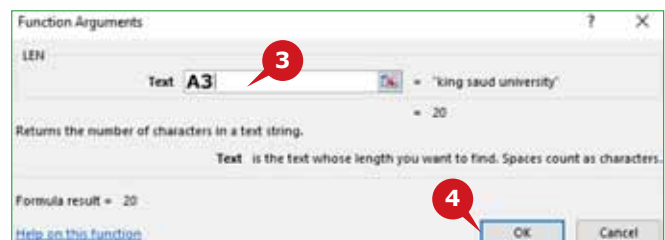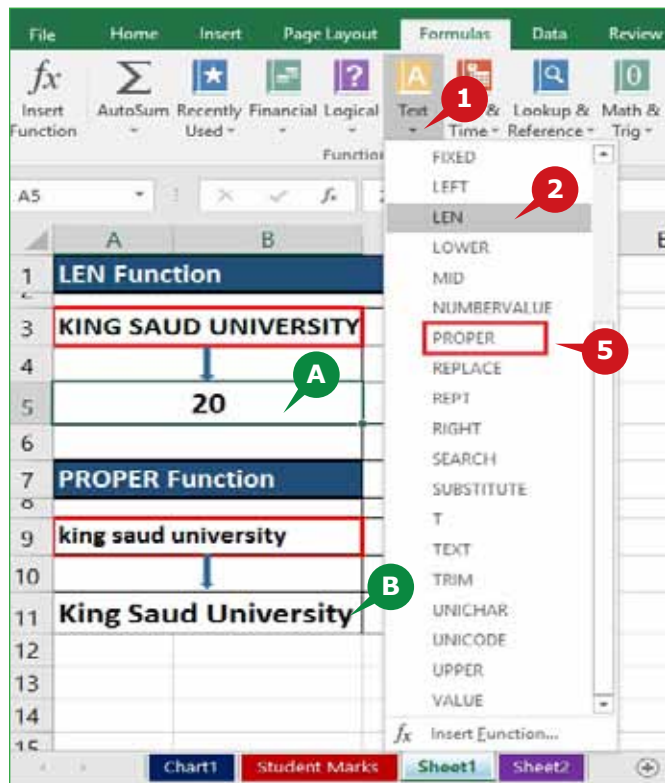
THE IF FUNCTION

The IF function allows you to evaluate a situation which has two possible results and calculate a different value for each result. The IF function returns one value if a specified condition evaluates to TRUE, or another value if it evaluates to FALSE.

Syntax:

=IF(logical_test, value_if_true, [value_if_false])

Logical test: Any value or expression that is evaluated to TRUE or FALSE.

Value if true: The value that is returned, if the logical test argument evaluates to TRUE.

Value if false: The value that is returned, if the logical test argument evaluates to FALSE.

To use the IF function, select the cell to display the result and follow the steps given below:

1. Click on the Logical category in the Function Library group.

2. Select the IF function from displayed list of logical functions.

   Function Arguments dialog box appears.

3. In the dialog box, enter the arguments such as:
   - Logical_test: G2>60
   - Value_if_true: PASS
   - Value_if_false: FAIL

4. Click on the OK button.

A. Result is displayed in the selected cell.
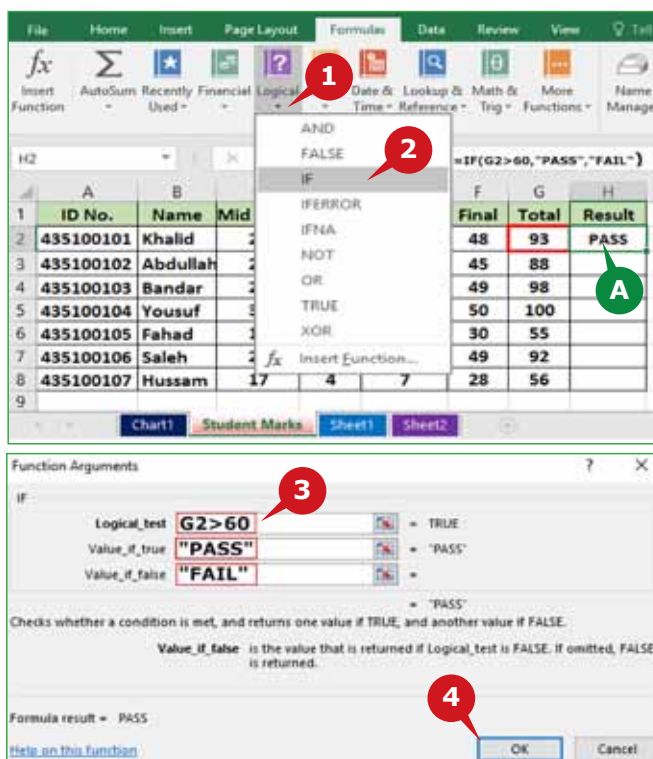
NESTED IF STATEMENT

Sometimes you need to work with situations where there are more than two possible results. That is where nested IF statement is generally used. For example, Nested IF statement can be used while calculating the grades of students with the following conditions or criteria:

- If the Project Marks > 30, Grade = A
- If the Project Marks > 20, Grade = B
- If the Project Marks < 20, Grade = FAIL

To use Nested IF statement, select a cell to display the result and follow the steps given below:

1 Click on the Logical category in the Function Library group.

2 Select the IF function from the displayed list of Logical functions. Function Arguments dialog box appears.

3 In the dialog box, enter the arguments, such as:
- Logical_test: G2>30
- Value_if_true: A

4 Click in the Value_if_false box and click in the Name box.

5 Function Arguments dialog box appears again for the next IF statement. In the dialog box, enter the arguments, such as:
- Logical_test: C2>20
- Value_if_true: B
- Value_if_ False: FAIL

6 Click on the OK button.

A Grades are displayed according to the specified criteria. You can drag the fill handle to calculate grade for other students.

B The Nested IF statement appears in the Formula Bar.
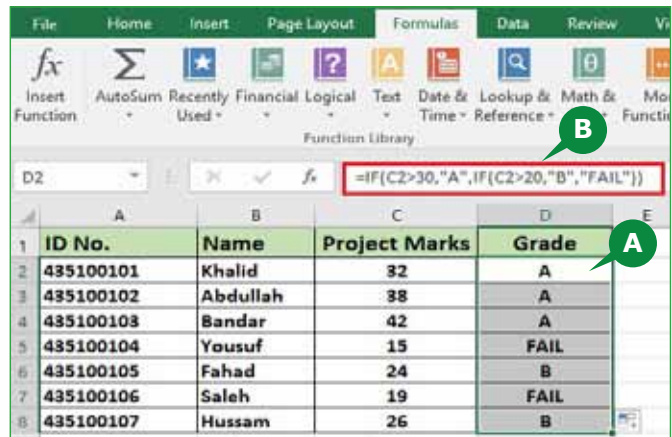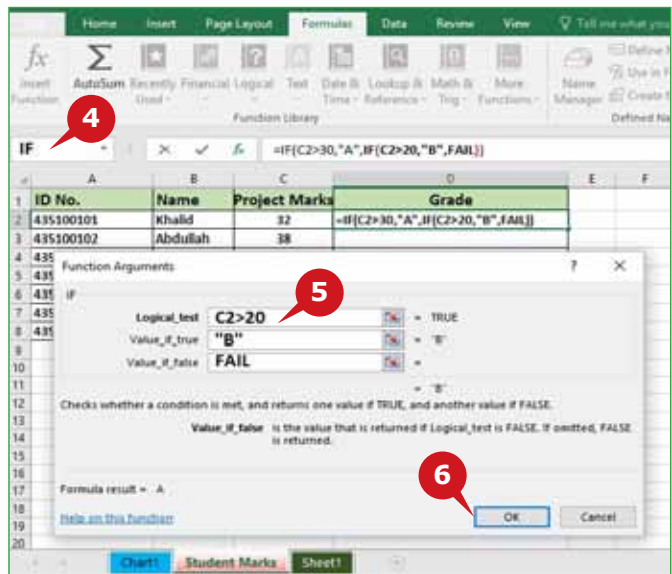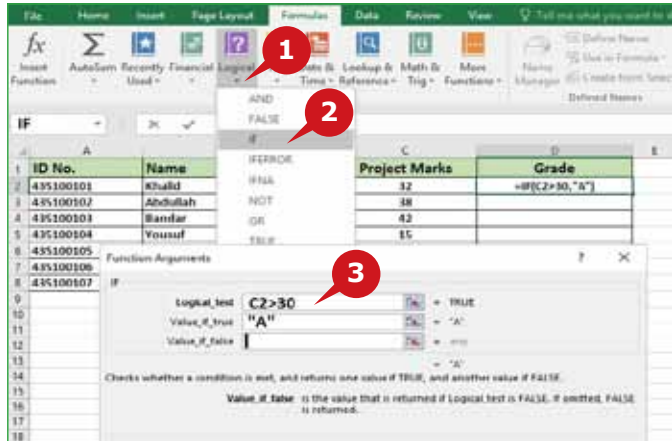
THE SUMIF FUNCTION

The SUMIF function is used to add the values in a range that meets specified criteria. For example, you have purchased items of different categories and you want to calculate the total cost of each category. For this type of calculation, you can use the SUMIF function.

Syntax:
=SUMIF(range, criteria, [sum range])

To use SUMIF function, select the cell to display the result and follow the steps given below:

1 Click on the Math & Trig category in the Function Library group.

2 Select the SUMIF function from the displayed list of functions.
   Function Arguments dialog box appears.

3 In the Range box, enter or select the cell range that contain different categories, from the worksheet.

4 Enter the Criteria in the Criteria box.

5 In the Sum_range box, enter or select the cell range that is to be calculated, from the worksheet.

6 Click on the OK button.

A The sum is calculated only for items of the selected category.
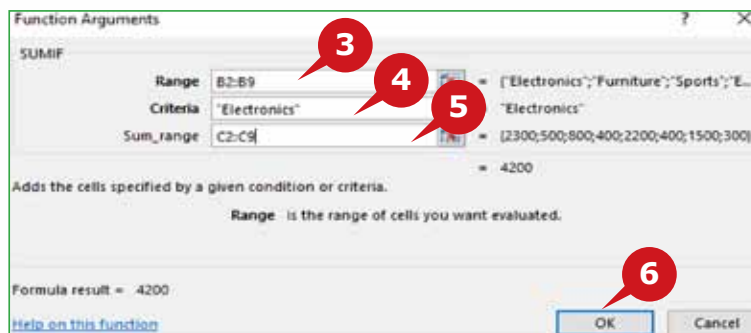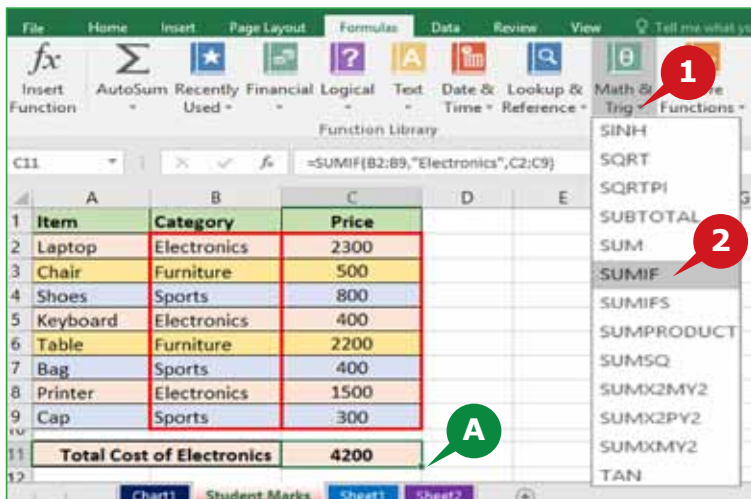
THE COUNTIF FUNCTION

The COUNTIF function counts the number of cells within a range that meets specified criteria. For example, if you want to calculate the number of students present or absent on a particular date, COUNTIF function is helpful.

Syntax:
=COUNTIF(range, criteria)

To use the COUNTIF function, select the cell to display the result, and follow the steps given below:

1 Click on the More Functions category in the Function Library group.

2 Point to the Statistical option and select the COUNTIF function from displayed list of functions.

Function Arguments dialog box appears.

3 In the Range box, enter or select the cell range you want to count, from the worksheet.

4 Enter the criteria in the Criteria box.

5 Click on the OK button.

A The number of cells are counted based on the criteria.
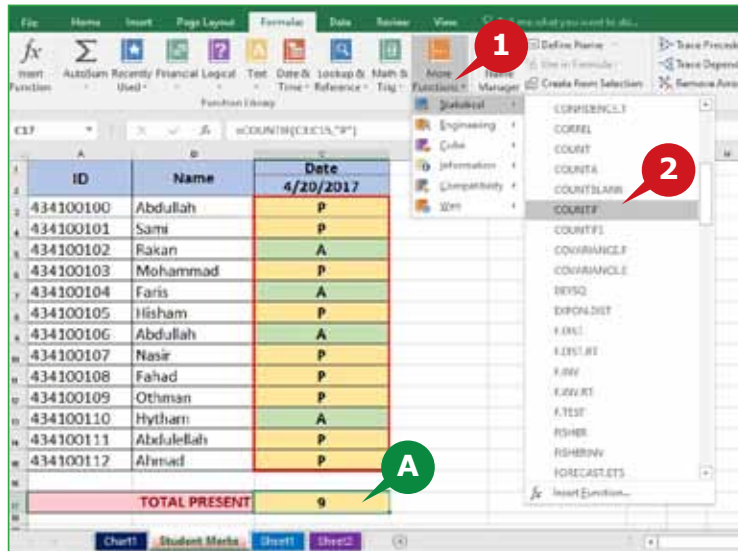
ACTIVITIES

Activity   **1**

Choose the correct option for the following statements.

1. The_____ function is used to count the number of characters in a text string.

    a. COUNT

    b. COUNTA

    c. COUNTALL

    d. LEN

2. The_____ function is used to evaluate a condition as true or false.

    a. MAX

    b. IF

    c. SUM

    d. AVERAGE

3. The_____ function counts the number of cells in a range that are not empty.

    a. COUNTA

    b. COUNT

    c. COUNTALL

    d. COUNTIF

4. The _____ function capitalizes the first letter of each word and changes all other letters to lowercase.

    a. UPPER

    b. PROPER

    c. TOGGLE

    d. LOWER

Activity 2

Fill in the blanks with the appropriate words provided in the box.

MIN	Function	IF	COUNTIF	SUMIF

1. A _____ is a preset formula, that is useful to perform various mathematical, statistical, or logical operations.

2. The _____ function is used to find the smallest value in the selected range of cells.

3. The _____ function adds numbers in a range of cells based on the specific criteria.

4. The _____ function counts the number of cells within a range that meets the specified criteria.

Activity 3

Practice the following tasks on your computer.

1. Create a blank Workbook. Enter the data of 5 students under the column headings "ID Number", "Name", "Midterm marks", and "Final marks" in cell range from A1 to D6.

2. Enter the column heading "Total marks" in cell E1 and calculate total marks for each student in cell range from E2 to E6.

3. Calculate the average "Total marks" of all students in cell E8. (Hint: You can type the text "Average marks:" in the cell D8.)

4. Calculate the Maximum "Total marks" in cell E10 and the Minimum "Total marks" in cell E11.

5. Count the total number of students in cell A10. (Hint: You can use "ID Number" column to count.)

Session 19

THE FORMULAS TAB, CELL REFERENCING, THE VIEW TAB & WORKBOOK SECURITY

OBJECTIVES

General Objectives

In this Session, you will learn about the Formula Auditing Group of the Formulas Tab, Cell Referencing, Window group of the View Tab, and the Workbook Security in Excel 2016.

Specific Objectives

At the end of this Session, you should be able to understand and practice:

- **The Formulas Tab**
  - Formula Auditing group

- **Cell Referencing**

- **The View Tab**
  - Window group

- **Workbook Security**
  - Workbook Password

LEARNING

THE FORMULAS TAB

In the previous session, you learnt about the Function Library group of the Formulas tab. In the following section, you will learn about the Formula Auditing group of the Formulas tab.

FORMULA AUDITING GROUP

When Excel 2016 cannot properly evaluate a formula or a function, it displays an **Error**. The **Formula Auditing** group enables you to check the worksheet for errors and accuracy. It also enables you to display the actual formula in the cells instead of the formula result.
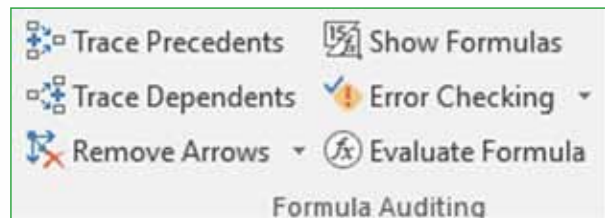
SHOW FORMULAS

Formula results are shown in the worksheet cells, while the formulas are visible in the formula bar. The **Show Formulas** command is used to display the actual formula or function applied to a cell instead of the resulting value. Showing formulas in the cells makes it easy to find the cells that contain formulas or to check for errors.

To Show Formulas in the cells,

1 Click on the Show Formulas command in the Formula Auditing group.

A Formulas are displayed in the cells instead of the results.
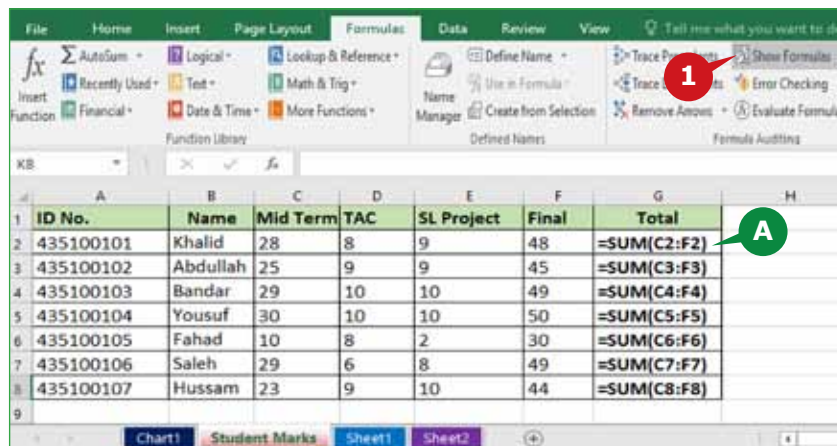
TIP

You can use the keyboard shortcut **Ctrl + ~** (grave accent key-above the Tab key) to quickly switch between formulas view and their results.

ERROR CHECKING

The Formulas and Functions can sometimes result in error values. It is a good practice to perform an error check once your worksheet is ready with calculations. The **Error Checking** command helps you to check for common errors that occur when using formulas or functions. This command shows you the cells containing the error, the type of error and other error information. Then you have the access to a number of options to check and correct these errors.

To check the worksheet for errors, follow the steps given below:

1 Click on the Error Checking command in the Formula Auditing group.

A Excel jumps to the first cell containing the error.

B The Error Checking dialog box appears which displays error information.

2 To edit the formula, click on the Edit in Formula Bar button in the dialog box.

3 Edit the formula with valid syntax, reference or arguments and press the Enter Key.

C The formula is recalculated and the correct result is displayed in the cell.

4 Click on the Resume button in the dialog box to continue error checking for other cells.
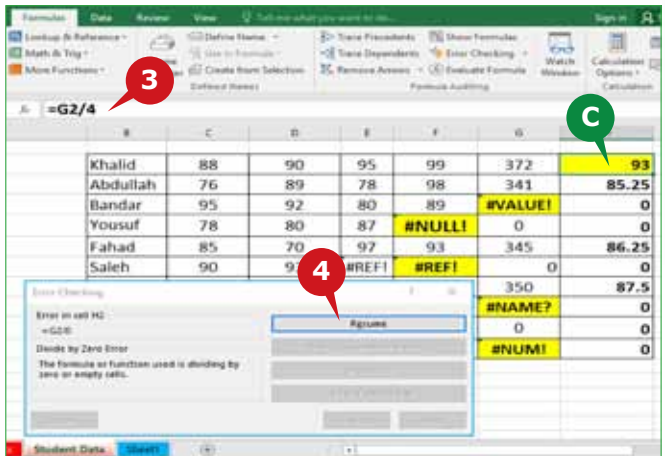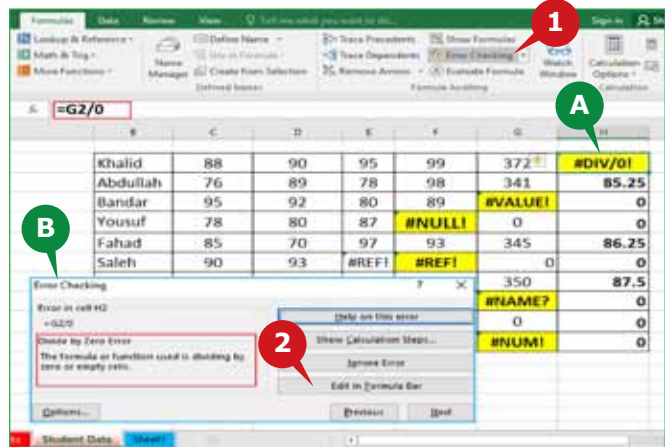
The options displayed in the Error Checking dialog box are:

- Help on this error: Displays information specific to the error type.
- Show Calculation Steps: Demonstrates all steps leading to the error.
- Ignore Error: Allows you to accept the formula as entered.
- Edit in Formula Bar: Allows you to edit the formula in the Formula Bar.

TIP

The cell containing the error is marked with a small green triangle in the upper-left corner. Select the cell to get error information. Also the Error Checking button appears on the left side of the cell.

COMMON ERROR TYPES IN EXCEL

While working with a worksheet, it becomes essential to identify and fix errors. Following are some of the common **Error Types** in Excel 2016.

Error/ Solution	Description	Example
#DIV/0!	When a number is divided either by zero (0) or by a cell that contains zero (0) value or no value.	**=A5/0**
Solution	Change the cell reference or value of denominator.	**=A5/3**
#NULL!	When you incorrectly specify cell ranges. The areas C2:C3 and E4:E6 do not intersect.	**=SUM(C2:C3 E4:E6)**
Solution	Make sure cell ranges are correctly separated. Adding a comma between the C and E ranges will correct it.	**=SUM(C2:C3,E4:E6)**
#NUM!	When a formula or function contains invalid numeric values.	**=SQRT(-4)**
Solution	Check and update the formula with valid numbers.	**=SQRT (4)**
#NAME?	The Formula is unrecognized i.e. a syntax error.	**=SSUM(E10:E15)**
Solution	Use the Function Wizard or type the correct formula.	**=SUM(E10:E15)**
#REF!	Cell reference is not valid. Cells may have been deleted like C2 that was referred to by formula.	**=SUM(B2,#REF!,D2)**
Solution	Adjust the formula so that it uses a reference that exists. Either use Undo (Ctrl+Z) to undo the deletion, rebuild the formula, or use a continuous range reference like: = SUM(B2:D2)	**=SUM(B2,C2,D2)**
#VALUE!	Formula or operator is wrong. Also one or more cells that are included in an arithmetic formula contain text.	**=D10, D34**
Solution	Type the correct operand and make sure the appropriate data is referenced.	**=D10+ D34**

CELL REFERENCING

You know that each cell is identified by its reference i.e. the column letter and row number (e.g., D5). Excel 2016 refers to a cell or a range of cells on a worksheet to locate the values that are calculated by formulas or functions. For example, **=C2** refers to **Cell C2** and returns the **value of Cell C2**. Similarly, **=Sheet2! B2** refers to **cell B2 of Sheet2** and returns the value of **Cell B2** of Sheet2. These references allow formulas or functions to dynamically update their results.

TYPES OF CELL REFERENCES

There are three types of Cell References in Excel 2016 i.e., **Relative**, **Absolute** and **Mixed** cell references. The type of cell reference being used is important, as each cell reference behaves differently when a formula or function is copied or filled to another cell.

RELATIVE CELL REFERENCING

In the Relative cell reference, the cell reference automatically changes when the formula is copied across a column or a row. It is especially convenient when you need to repeat the same calculation across multiple rows or columns. For example, after you calculate the total marks of first student using the Sum formula, you copy or autofill the same formula to calculate the total marks for other students. You can observe that the Cell References in the formula of each next cell gets updated relative to the rows and columns.

ABSOLUTE CELL REFERENCING

An Absolute cell reference is fixed i.e. the cell reference does not change when you copy a formula from one cell to another cell. An absolute reference is designated in a formula by the addition of a dollar sign ($) preceding both the column and the row. For example, **A2** means that the column and the row do not change when a formula is copied.

For example, cell **E10** contains some bonus marks to be added to the total marks of each student. To add the cell reference (E10) to the Sum formula, type a **$** sign before column letter and row number of the cell i.e. **E10**. Copy or autofill the SUM formula for other students. Observe that the cell reference **E10** remains constant in every formula and does not change as in Relative cell referencing.

MIXED CELL REFERENCING

A Mixed cell reference has either an absolute column and a relative row, or an absolute row and a relative column. For example, **$A1** is an absolute reference to column **A** and a relative reference to row **1**. When the mixed reference is copied from one cell to another cell, the absolute reference stays the same but the relative reference changes. You can use this reference to generate a multiplication table.

MULTIPLE SHEET REFERENCING

In Excel 2016, you can create formulas to calculate data from multiple sheets. This is called Multiple sheet reference. For example, **Sheet2** contains the marks scored by the students in the Mid Term exam and **Sheet3** contains the marks scored in the Final Term exam. Now in **Sheet1**, you can calculate the Total Marks.

To Use **Multiple Sheet Referencing**, select the cell of **Sheet1** where you want to display the total marks of first student, type the Equal to Sign = and follow the steps given below:

1 Select Sheet 2 from the Sheet Tab and in Sheet 2 select the cell that contains Mid Term Marks of first student. Type the + operator.

2 Select Sheet 3 from the Sheet Tab and in Sheet 3 select the cell that contains the Final Term Marks of first student. Press the Enter Key.

A The total marks are calculated, you can autofill the formula for other cells.

THE VIEW TAB

The View Tab contains many useful groups such as Workbook Views, Show, Zoom, Window and Macros. In the following section, you will learn about the Window group of the View Tab.

WINDOW GROUP

The commands of the Window group enable you to lock particular rows or columns and divide a worksheet into separate panes. It helps you to compare worksheet data easily.

FREEZE PANES

The **Freeze Panes** command enables you to lock specific rows or columns in place to keep them visible while you are scrolling rest of the worksheet. Using this feature, you can freeze header rows or columns to keep them visible at all times.

You can choose to freeze just the top row, the first column or multiple rows and multiple columns. You need to select a row below the row(s) that you want to freeze or select a column to the right of column(s) that you want to freeze.

To Freeze both row(s) & column(s), follow the steps given below:

1 Select the cell to freeze all the rows above it and all the columns to the left of it.

2 Click on the Freeze Panes command.

3 Choose the Freeze Panes option.

A To freeze the top row, use the Freeze Top Row option from the Freeze Panes command.

B To freeze the first column, use the Freeze First Column option from the Freeze Panes command.
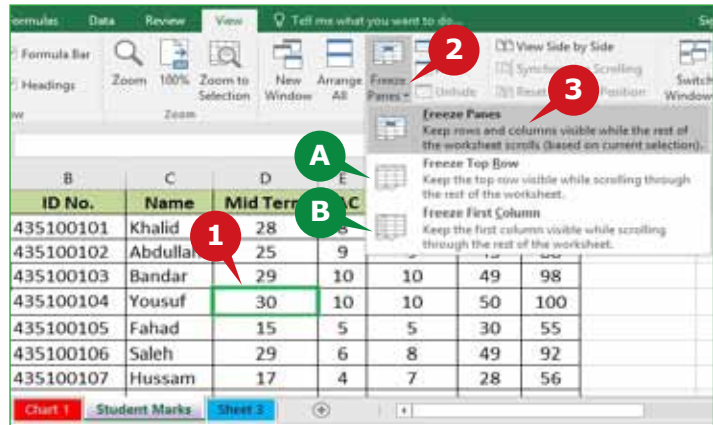
TIP

After applying Freeze Panes, the dropdown menu of the Freeze Panes command will show the Unfreeze Panes option, which you can choose to Unfreeze the panes.

SPLIT WORKSHEET WINDOW

The Split command enables you to split the worksheet window into separate panes. Splitting a worksheet helps you to compare data from different parts of the worksheet at the same time by scrolling each part independently. You can split a worksheet horizontally or vertically.

To Split the worksheet Horizontally, follow the steps given below:

1 Select the row where you want to split the worksheet.

2 Click on the Split command in the Window group.

A The worksheet is divided into separate Horizontal panes.

B Vertical Scroll Bars appear for each pane.

To Split the worksheet Vertically, follow the steps given below:
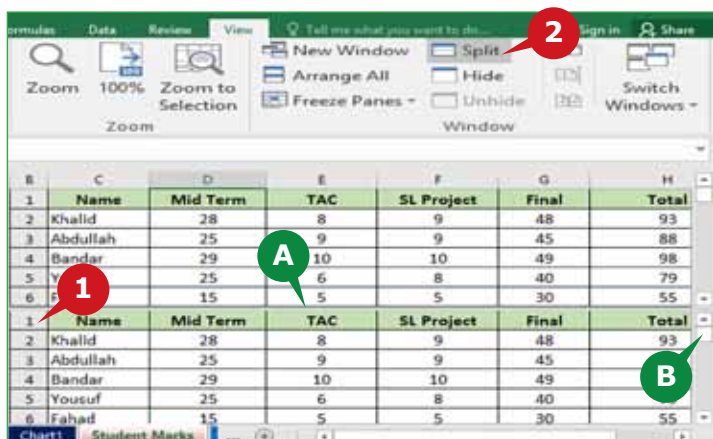
1 Select the column where you want to split the worksheet.

2 Click on the Split command in the Window group.

A The worksheet is divided into separate Vertical panes.

B Horizontal Scroll Bars appear for each pane.
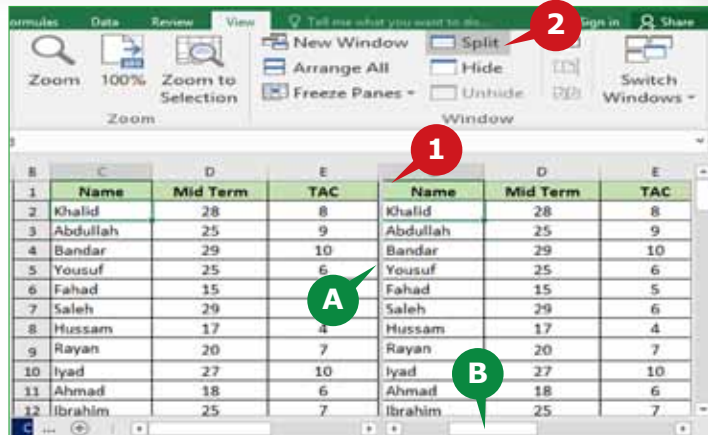
To remove the split, click on the Split command.

TIP

To split a worksheet both horizontally & vertically at the same time, select the cell which intersects both row and column where you want to split the worksheet and then click on the **Split command.**

WORKBOOK SECURITY

Your workbooks can contain sensitive information like Credit Card Numbers, Identification Numbers, Employee Information etc. Excel 2016 enables you to secure your work to prevent unauthorized access to your workbook. The following section will guide you through Excel's password protection feature.

WORKBOOK PASSWORDS

You can protect your Excel workbook with a password to prevent the unauthorized users from accessing it. Once you encrypt an Excel workbook with a password, no one else will be able to open it.

CREATING A PASSWORD

Password is the most common and recommended technique to lock an Excel workbook.

To create a Workbook Password, click on the **File** Tab and follow the steps given below:

1 In the Backstage view, from the Info option, click on the Protect Workbook command.

2 Click on the Encrypt with Password option from the displayed list.

3 Type the password in the Encrypt Document dialog box and click on the OK button.

4 Re-enter the password in the Confirm Password dialog box.

5 Click on the OK button and save the workbook to apply the password.

A When you open the workbook, Excel 2016 prompts you to enter the password for the workbook.
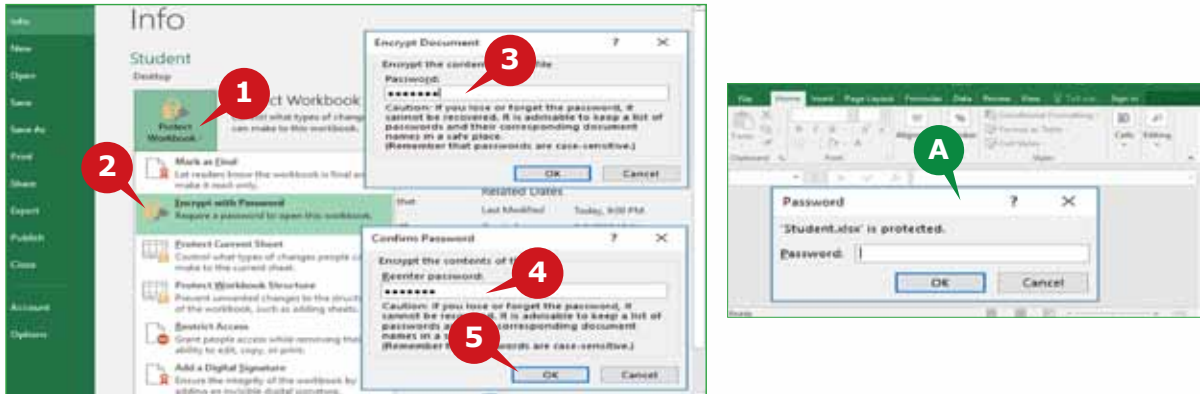
REMOVING A PASSWORD

You can also remove the password from the protected workbook.

To Remove the Password, click on the File Tab and follow the steps given below:

1 In the Backstage view, from the Info option click on the Protect Workbook Command.

2 Click on the Encrypt with Password option from the displayed list.

3 In the Encrypt Document dialog box, select the password and press the Delete key.

4 Click on the OK button and save the workbook.
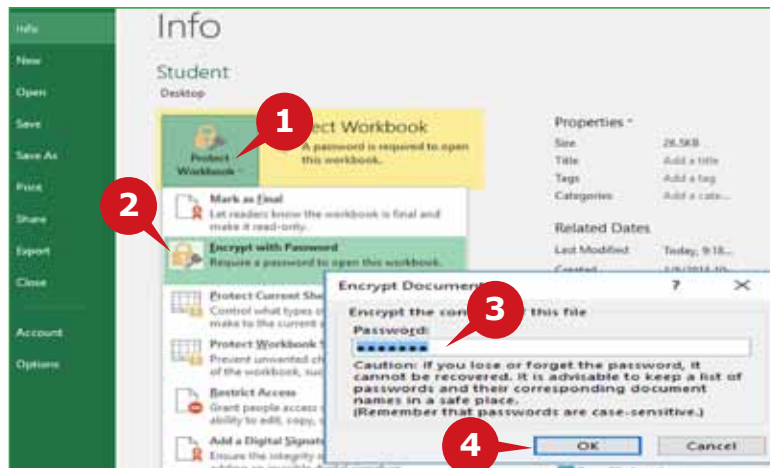
ACTIVITIES

Activity **1**

Choose the correct option for the following statements.

1. The _____ command is used to display formulas in the cells instead of result values.

    a. Display Formulas

    b. Remove Values

    c. Show Formulas

    d. Auto Sum

2. The_____ command helps you to check for errors that occur in a worksheet.

    a. Name Box

    b. Auto Sum

    c. Remove Error

    d. Error Checking

3. An absolute cell reference in a formula is recognized by the _____ sign preceding both the column and the row headings.

    a. &

    b. $

    c. %

    d. @

4. The _____ command is used to divide the worksheet window into separate panes.

    a. Divide

    b. Split

    c. Freeze

    d. Hide

Activity 2

Fill in the blanks with the appropriate words provided in the box.

FREEZE PANES	PASSWORD	#NULL!	#VALUE!	# NUM!

1. The _____ error is displayed when one or more cells that are included in an arithmetic formula contain text.

2. The_____ error indicates that formula contains invalid numeric values.

3. The _____command enables you to lock specific rows or columns while you scroll the worksheet.

4. You can protect your Excel workbook with a _____ to prevent others from accessing it.

Activity 3

Practice the following tasks on your computer.

1. Create a blank Workbook. Create the column headings "ID Number", "Name", "Total Marks" in the cell range from A1 to C1. Enter the data for 5 students in the range from A2 to C6. Freeze the "Top Row" of the sheet.

2. Create the column heading "Final marks" in cell D1. Enter the bonus marks "10" in the cell E2. Add the bonus marks to the Total Marks of each student and display the sum in the "Final marks" column. (Hint: You can use Absolute Cell Reference.)

3. Split your worksheet horizontally.

4. Protect your workbook with a password.

Module Five

Presentation Graphics (PowerPoint 2016)

Session 20: Overview of Presentation Graphics & Getting Started With Powerpoint 2016

Session 21: The Home Tab

Session 22: The Insert Tab And The Design Tab

Session 23: The Transition Tab, The Animation Tab, The Slide Show Tab And The View Tab
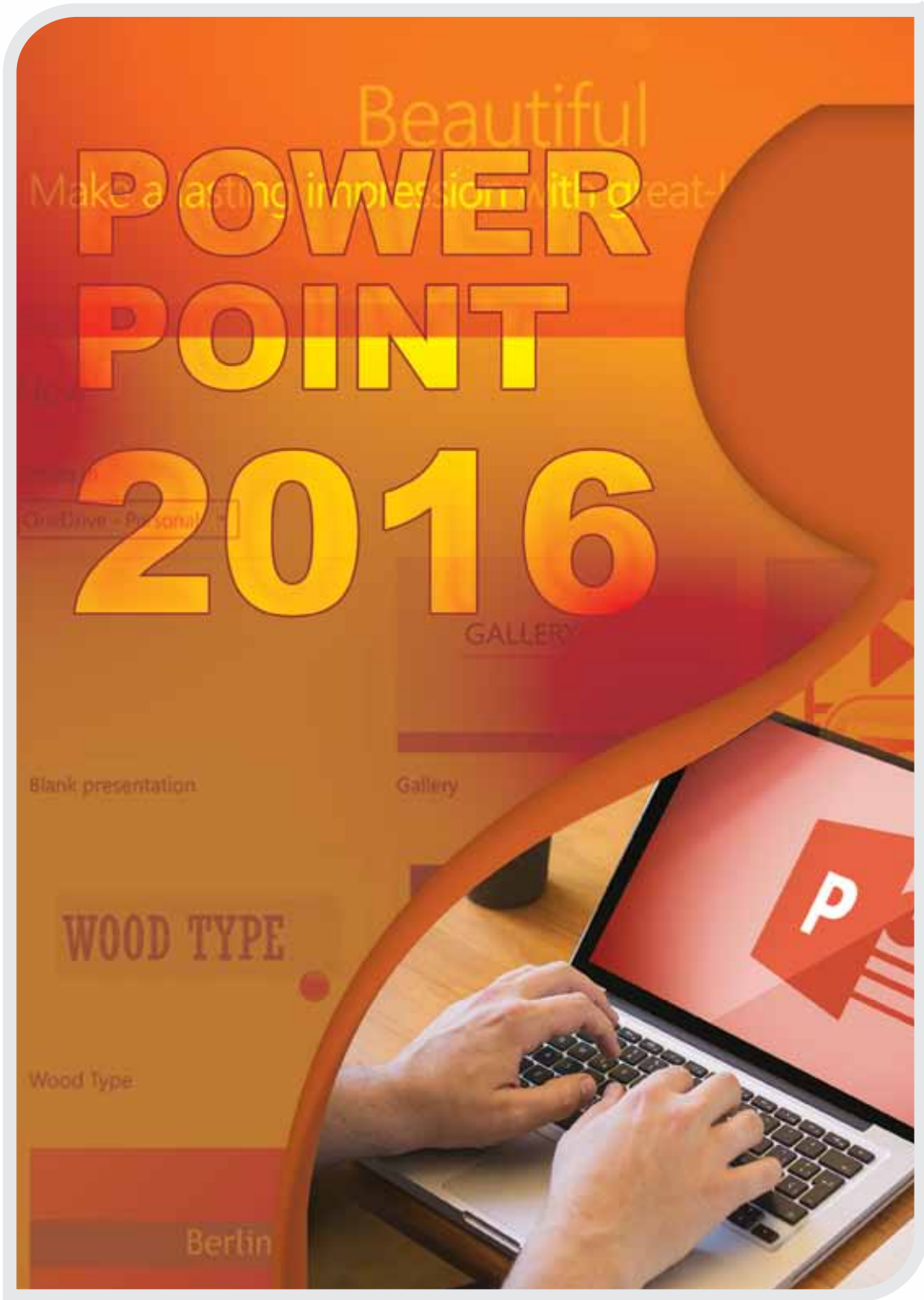
Session 20

OVERVIEW OF PRESENTATION GRAPHICS & GETTING STARTED WITH POWERPOINT 2016

OBJECTIVES

General Objectives

In this session, you will learn about Overview of Presentation Graphics and Getting Started with PowerPoint 2016.

Specific Objectives

At the end of this session, you should be able to understand and Practice:

- **Overview of Presentation Graphics**
  - Presentation Graphics Applications

- **Getting Started with PowerPoint 2016**
  - Starting PowerPoint 2016
  - User Interface
  - Creating a Presentation
  - Saving and Printing a Presentation

LEARNING

OVERVIEW OF PRESENTATION GRAPHICS

For working with text documents you have used Word 2016 and Excel 2016 for numeric data analysis. However, Presentation Graphics applications such as PowerPoint 2016, allow you to present your information in an attractive manner.

PRESENTATION GRAPHICS APPLICATIONS

Presentation graphics application is designed to create and present information graphically in the form of slides. This application integrates text, images, audio, video, animations and sound effects that makes up a presentation. The information is arranged in slides, which can be set to appear as frames with a mouse click or automatically after specified time.

FEATURES OF PRESENTATION GRAPHICS APPLICATIONS

A **Presentation Graphics** application has the following key features:

- Slide: A slide is a single page of a presentation, created with the Presentation Graphics application.
- Placeholders: These are dotted boxes in a slide, which are used to add Text, Pictures, Charts, Tables and other objects.
- Objects: These are elements of a slide such as Text boxes, Pictures, Tables, Charts, SmartArts, etc.
- Animations: These are a set of visual effects that can be applied to objects, so that it will animate during the Slide Show.
- Transitions: These are visual effects applied to the slides, when moving from one slide to another.

POPULAR PRESENTATION GRAPHICS APPLICATIONS

There are a varieties of Presentation Graphics applications available in the market that have different features. Following are some of the popular applications:

- Microsoft PowerPoint 2016
- Apple Keynote
- Corel Presentations

GETTING STARTED WITH POWERPOINT 2016

PowerPoint 2016 is one of the most widely used Presentation Graphics application. It enables you to create professional presentations containing animations, narrations, images, videos, audios, etc., in your presentation.

STARTING POWERPOINT 2016

To start **PowerPoint 2016** in Windows 10, follow the steps given below:

1 Click Start button to open the start Menu.

2 Click on PowerPoint 2016 from the All Apps list.

The **Start Screen** of PowerPoint 2016 appears with a list of recently used files and available templates. You can either open an existing presentation, start with a new blank presentation, or choose a template. You can also press the **Esc** key to start with a new blank presentation.

THE USER INTERFACE

Exploring and understanding the User Interface of PowerPoint 2016 will help you work efficiently in the later sessions. The User Interface of the PowerPoint 2016 consists of the following elements.

A Slide Thumbnails Pane: It appears on the left side of the PowerPoint 2016 window. In the Slide Thumbnails pane, you can rearrange, delete, hide, duplicate and add new slides in the presentation.

B Slide Area: It is the actual slide where you can add objects such as Text, Pictures, Tables, Charts, Videos, etc.

C Notes Pane: It is located below the Slide Area, which enables you to add notes for each slide. These notes are also known as **Speaker Notes** that the presenter can refer to while delivering the presentation.

D Status Bar: It is a strip at the bottom that displays active slide number and contains the zoom buttons and the View buttons.

E View Buttons: These are used to switch between the views of the presentation i.e., Normal, Slide Sorter, Reading and Slide Show view.
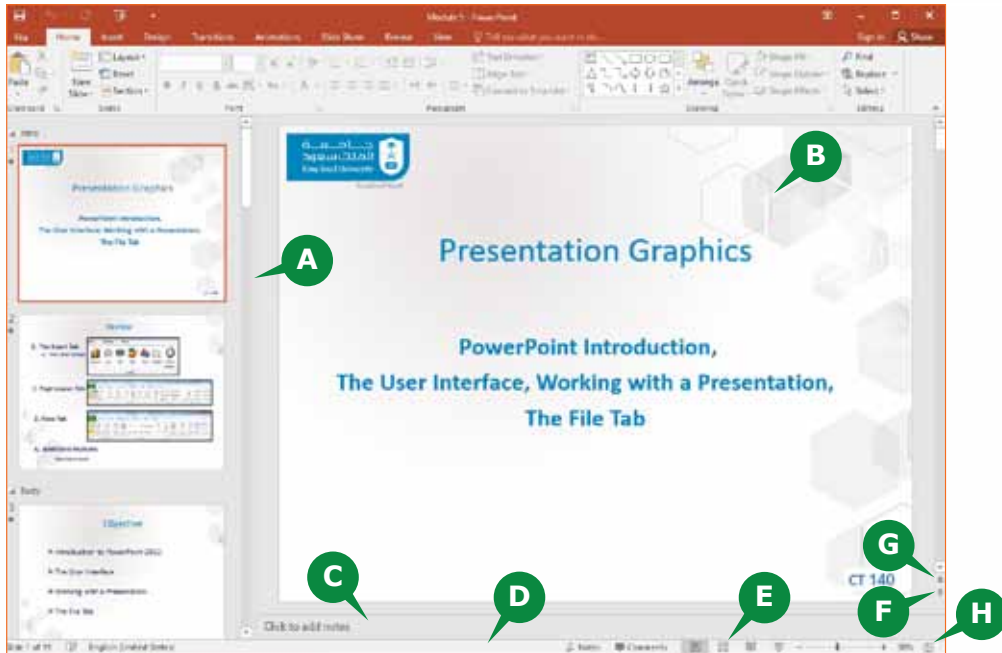
F Next Slide: This button enables you to move to the next slide in the presentation.

G Previous Slide: This button enables you to move to the previous slide in the presentation.

H Fit Slide to Current Window: This button enables you to fit the current slide to the Slide Area.

RESIZING PANES

There are two Panes in the PowerPoint 2016 user interface, namely the Thumbnails Pane and the Notes Pane. The Notes Pane can be increased if there are more notes to be mentioned in that area. The size of the Slide Thumbnails Pane can be customized for the desired visual appearance of the miniature slides.

To Resize the Panes, follow the steps given below:

1 Move the Mouse pointer over the edge of the Thumbnails Pane, the cursor becomes a two headed arrow. Click and drag to increase or decrease the pane area.

2 Move the Mouse pointer over the edge of the Notes Pane, the cursor becomes a two headed arrow. Click and drag to increase or decrease the pane area.
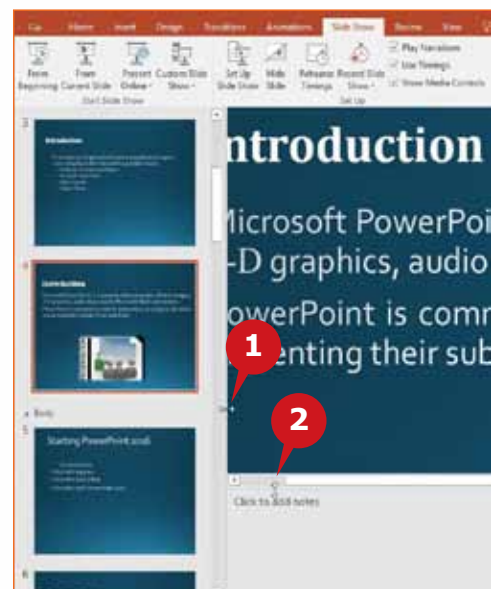
MOVING AND RESIZING THE PLACEHOLDERS

Placeholders are used to identify different objects in a slide such as Pictures, Charts, Tables or even Text.

To **Move** a Placeholder,
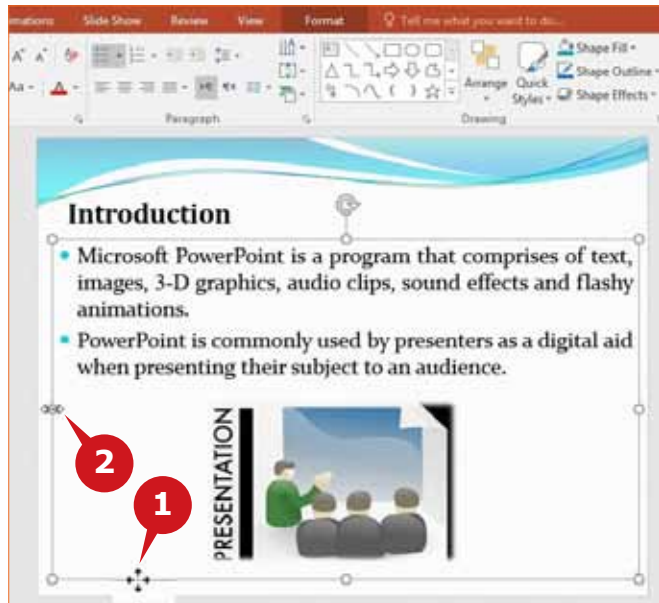
1 Move the mouse pointer over the placeholder border, it gets converted to a four-headed arrow. Drag to move the Placeholder as desired.

To **Resize** a Placeholder,

2 Select the Placeholder and place the mouse pointer over a sizing handle, it gets converted to a two-headed arrow. Drag to resize the Placeholder as desired.

CREATING A SIMPLE PRESENTATION

You can now start creating a new Presentation in PowerPoint 2016. The following section guides you through creating a new presentation, adding, moving, duplicating, and deleting slides.

CREATING A NEW PRESENTATION

You can create a new **Blank Presentation** when you start the PowerPoint 2016 application or from an open PowerPoint 2016 window.

To create a blank Presentation from an open PowerPoint 2016 window, follow the steps given below:

1 Open the File tab Backstage view and click on the New option.

2 Click on the Blank Presentation in the Backstage view.
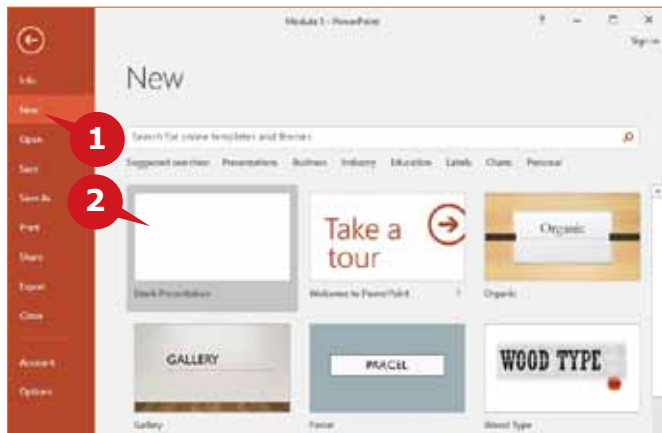
TIP

You can also choose from the various **Predesigned templates** *present in the Backstage view to create a new presentation.*

MANAGING SLIDES FROM SLIDE THUMBNAILS PANE

The Slide Thumbnails pane allows you to quickly organize, add or delete slides of your presentation.

To add a new slide, follow the steps given below:

1 Right click on a Slide in the Thumbnails pane.

2 Click on the New Slide option from the shortcuts menu.

To duplicate a slide,

3 Choose the Duplicate Slide option from the shortcuts menu.

To delete a slide,

4 Choose the Delete Slide option from the shortcuts menu.

TIPS

Keyboard Shortcuts:

New slide - CTRL + M

Duplicate Slide - CTRL + D
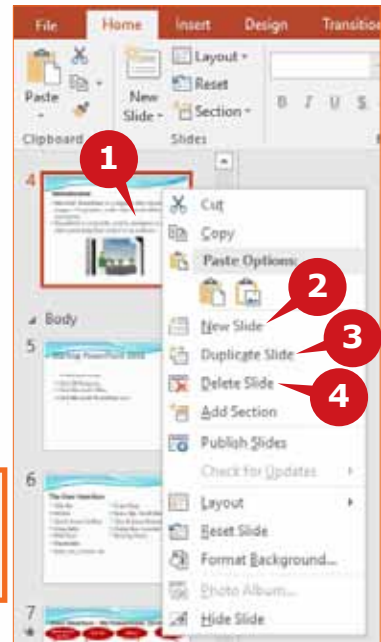
SELECTING MULTIPLE SLIDES

Procedures to select multiple slides is quite similar to selecting multiple objects in other Office applications i.e., with CTRL and SHIFT Keys.

- To select consecutive slides, click the first slide, hold down the SHIFT key and then click the last slide in sequence.
- To select non-consecutive slides, hold down the CTRL key and select the required slides.

MOVING SLIDES USING DRAG & DROP

In the **Slide Thumbnails Pane,** you can move the slides or rearrange the slides as required by **drag and drop** with mouse.

To move a slide using the Slide Thumbnails Pane,

1 Select the slide(s) and Drag & Drop it to the desired place.
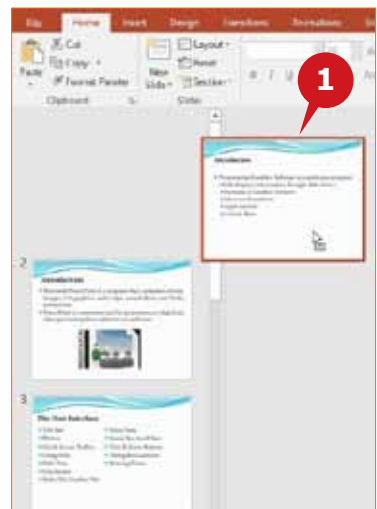
SAVING AND PRINTING A PRESENTATION

After creating a new Presentation, you need to know how to save it in order to access or edit. PowerPoint 2016 allows you to save your presentation in several ways and formats. You can also print it to view and share your presentation on hardcopies.

SAVING A PRESENTATION

Saving a presentation in PowerPoint 2016 is similar to saving a file in other Office applications.

To save a new presentation from the **File** Tab, follow the steps given below:

1. Click on the Save command from the File tab Backstage view.

2. Click on the Browse option.

3. Select the destination folder from the Save As dialog box.

4. Enter the name in the File name box.

5. Click the Save button.
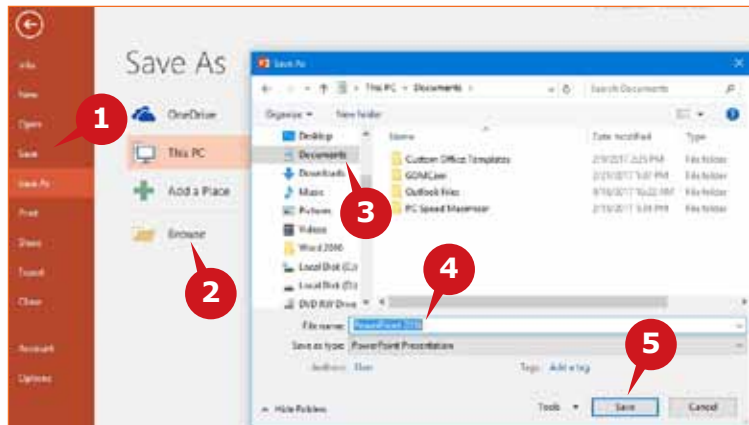
By default the presentation is saved with .pptx extension.

SAVE AS OPTION

By using the **Save As** command from the **File** tab, the Presentation can be saved in different formats like **PowerPoint Template, PowerPoint Show, MPEG-4 video format, JPEG format** and other formats.

To use Save As command, follow the steps given below:

1. Click on the Save As command from the File tab Backstage view.

2 Choose the desired file location by using the Browse button.

3 Click on Save as type drop down button.
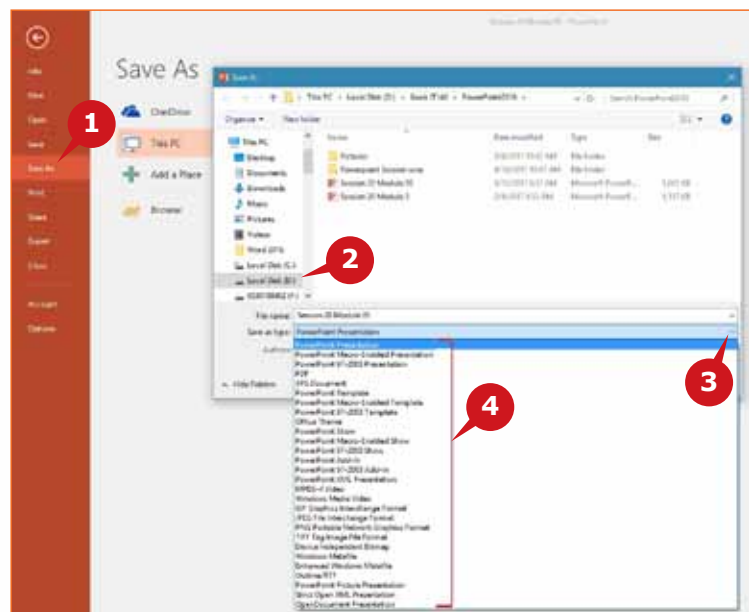
4 Select the desired file type and click on the Save button.

PRINTING A PRESENTATION

It is easy to preview and print the slides, speaker notes, slide outline or handouts of the presentation.

The **Handout** is used by the audience to follow along the slide show or keep for future reference. You can print handouts of your presentation, with one, two, three, four, six, or nine miniature slides on a single page.

To **print** the handouts of your presentation, follow the steps given below:

1 Click the Print command from the File tab Backstage view.

2 Click on the arrow button of the Full Page Slides option under the Settings.

3 Select the desired Handouts option.

4 Click on the Print button.
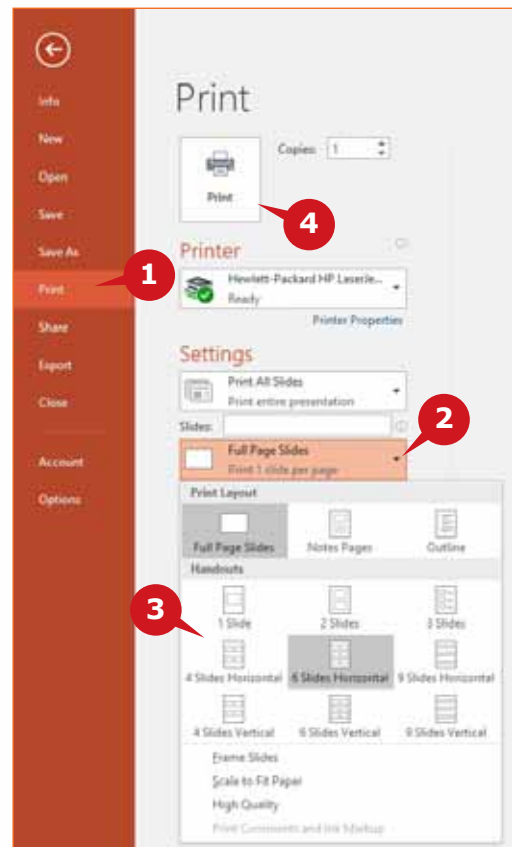
ACTIVITIES

Activity 1

Choose the correct option for the following statements.

1. _____ is a dotted box which is used to add objects in a slide.

   a. Slide

   b. Placeholder

   c. Speaker Note

   d. Note Pane

2. The keyboard shortcut to insert a new slide is_____.

   a. Ctrl + M

   b. Ctrl + N

   c. Ctrl + S

   d. Ctrl + D

3. A PowerPoint presentation is saved with the extension _____.

   a. .potx

   b. .pptm

   c. .ppsx

   d. .pptx

4. The keyboard shortcut to duplicate the selected slide is_____.

   a. Ctrl + M

   b. Ctrl + C

   c. Ctrl + D

   d. Ctrl + K

Activity 2

Fill in the blanks with the appropriate words provided in the box.

Slide Area	Duplicate Slide	Status bar	Notes	Slide Thumbnails

1. The _____ is a strip at the bottom of PowerPoint interface that displays the active slide number.

2. The _____ is the actual place where you add and edit objects.

3. _____ option is used to insert a new slide with the contents as well as the design of an existing slide.

4. The _____ pane appears on the left side of the PowerPoint window.

Activity 3

Practice the following tasks on your computer.

1. Create a new blank presentation and add 4 slides. Type the text "King Saud University" in slide 3 and save the presentation with the name "Practice". (**Hint:** You can save this presentation to the "Documents" folder on your computer.)

2. Move the slide 3 to above the slide 2.

3. Delete the slides 4 and 5 from the presentation.

4. Create a new presentation using the template "Welcome to PowerPoint" and duplicate the slide 4.

Session 21

THE HOME TAB

OBJECTIVES

General Objectives

In this session, you will learn about the Slides, Font, Paragraph, Drawing and Editing groups of the Home tab.

Specific Objectives

At the end of this session, you should be able to understand and Practice:

- **The Home Tab**
  - Slides Group
  - Font Group
  - Paragraph Group
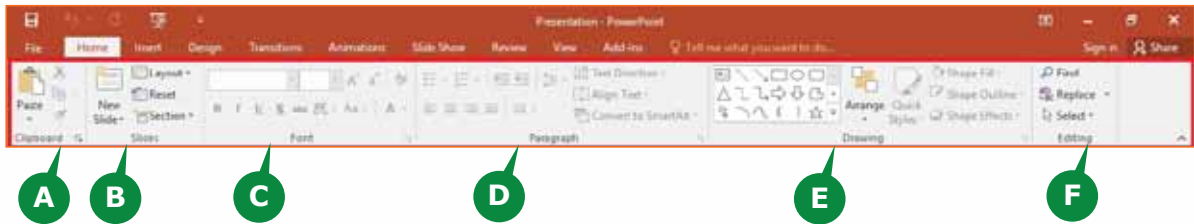 - Drawing Group
  - Editing Group

LEARNING

THE HOME TAB

The Home tab contains the most commonly used commands for editing and formatting slides. These commands are divided into six groups which are as follows:

- **A** Clipboard Group
- **B** Slides Group
- **C** Font Group
- **D** Paragraph Group
- **E** Drawing Group
- **F** Editing Group

SLIDES GROUP

The commands in this group enable you to add new slides, change the slide layout, reset slides, and to add new sections in the Presentation.

INSERTING A NEW SLIDE

When you insert a new slide from the slide thumbnails pane, the new slide is inserted with the default slide layout. Using the arrow of New Slide command, you can insert a new slide with the desired layout after the active slide.

To insert a new slide, follow the steps given below:

1 Click on the arrow of the New Slide command from the Slides group.

**2** Choose the desired Slide layout for the new slide.

CHANGING SLIDE LAYOUT

A slide layout contains pre-formatted placeholders for text, pictures, charts,videos, and more.

The **layout** of an existing slide can be changed by using the Layout command of the **Slides** group.

To change the layout of a slide, follow the steps given below:

1 Click the slide for which you want to change the Layout.

2 Click on the Layout command from the Slides group.

3 Choose the desired slide layout from the layout gallery.
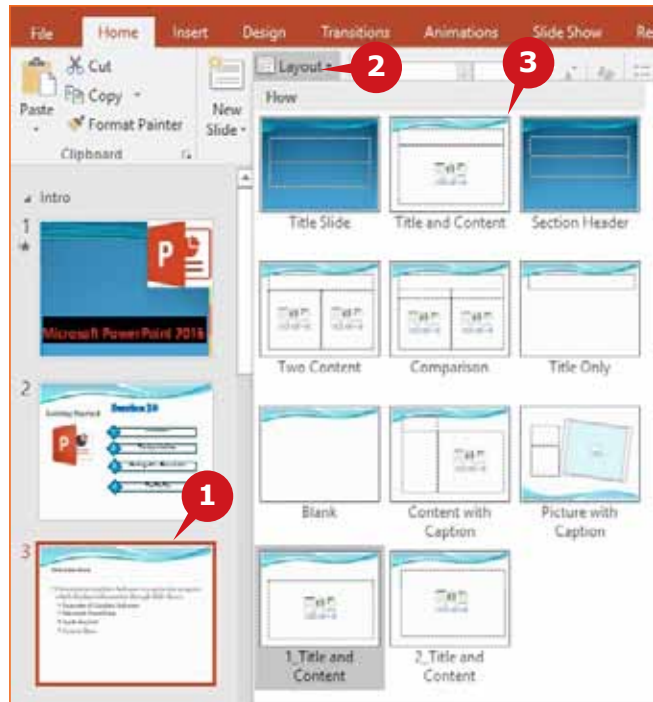
RESET SLIDE

The Reset command is used to reset the **position**, **size** and **formatting** of the **placeholders** in a slide to its default settings. This enables you to restore a slide to its default layout after you have made changes to it.

To **Reset** a slide, follow the step given below:

1 Click on the Reset command from the Slides group.

A The moved and resized placeholder before the Reset command.

B The placeholder has reverted to its default settings.

ORGANIZING SLIDES INTO SECTIONS

You can group several slides and create meaningful sections in a presentation. The **Section** command allows you to create, rename, or merge all sections in a presentation.

To create a section, follow the steps given below:

1 Click on the slide where you want to create a section.

2 Click on the Section command in the Slides group.

3 Select Add Section option from the drop down list.

To rename the section, follow the steps given below:

4 Click on the section name Untitled Section.

5 Click on the Rename Section option from the drop-down list of the Section command.

6 Enter the suitable section name in the Rename Section dialog box that appears.

7 Click on the Rename button.
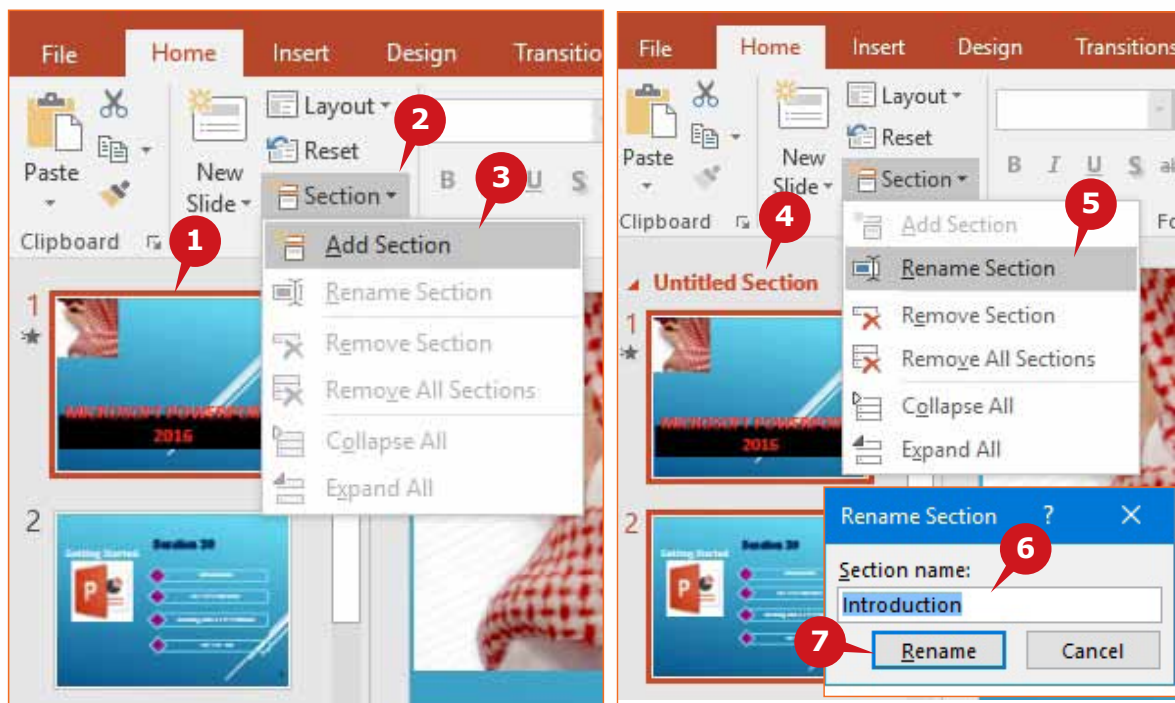
To remove all sections, follow the steps given below:

1 Click on the Section command from the Slides group.
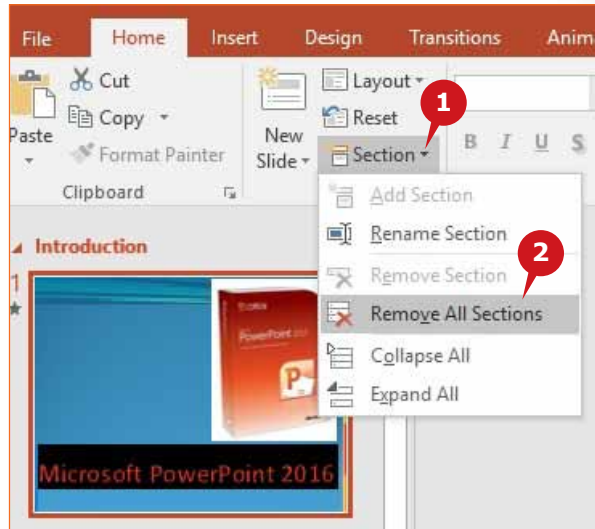
2 Select the Remove All Sections options from the drop down list.

FONT GROUP

The commands in the Font group of the Home tab enable you to modify and enhance the appearance of text. You can change the Font, Font Color, Font Size, Font Effects and more from this group.

APPLYING FONT, FONT SIZE, FONT COLOR

The procedures to change font, font size, and font color is same as what you have learned in Word 2016 or Excel 2016.

To change the Font of the selected text,

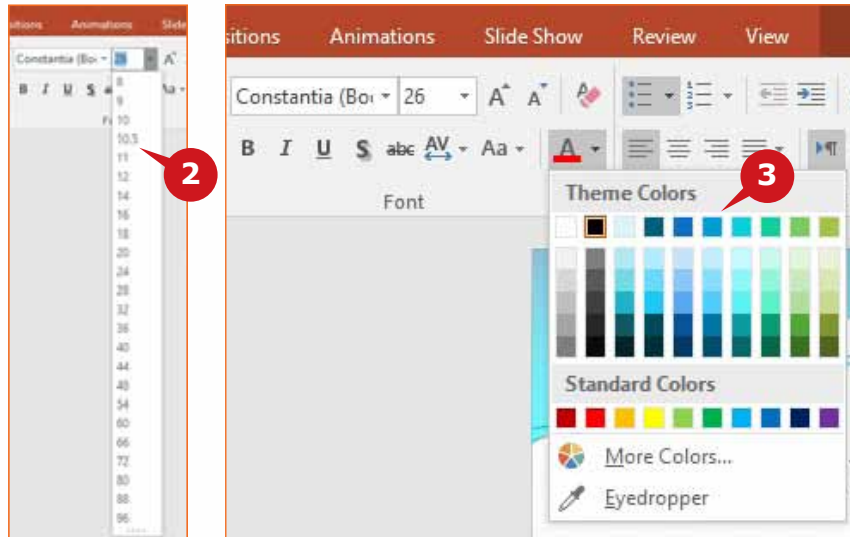**1** Click on the arrow of the Font command and choose the desired Font.

To change the Font size of the selected text,

2 Click on the arrow of the Font Size command and select the desired Font Size.

To change the Font color of the selected text,

3 Click on the arrow of the Font Color command and select the required color from the color palette.

INCREASE OR DECREASE FONT SIZE

Font size can also be increased or decreased quickly by using the Increase Font Size and Decrease Font Size commands in the Font group.

A Use the Increase Font Size command to increase the font size.

B Use the Decrease Font Size command to decrease the font size.
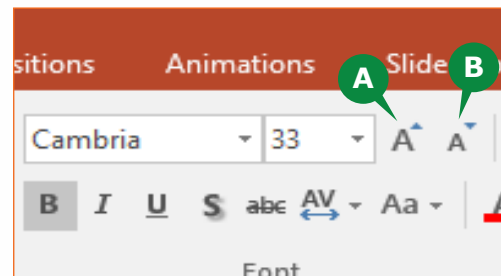
APPLYING BOLD, ITALIC, UNDERLINE AND STRIKETHROUGH EFFECTS

You can use the Bold, Italic, Underline or Strikethrough commands to emphasize the text.

A Use the [**B**] button to make the text thicker.

B Use the [*I*] button to make the text slant to the right.

C Use the [U] button to Underline the text.

D Use the [abc] button to apply the text effect Strikethrough.
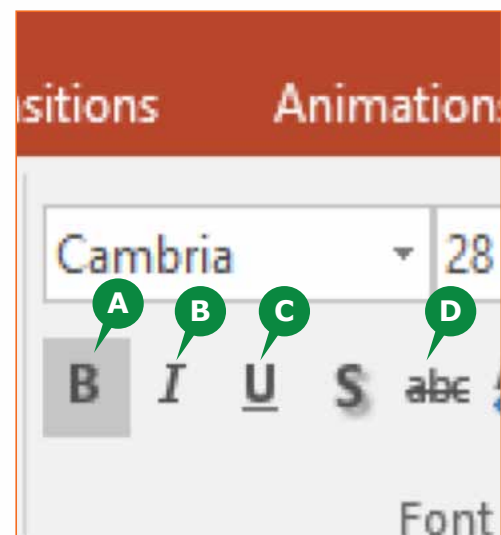
SHADOW EFFECT AND CHARACTER SPACING

The Shadow command is used to add a shadow behind the selected text to emphasize it. Whereas the Character Spacing command allows you to adjust the spacing between the characters of the selected text.

To apply the shadow effect to the selected text,

1 Click on the [S] button from the Font group.

To change the character spacing of the selected text,

2 Click on the Character Spacing command and choose the desired character spacing option
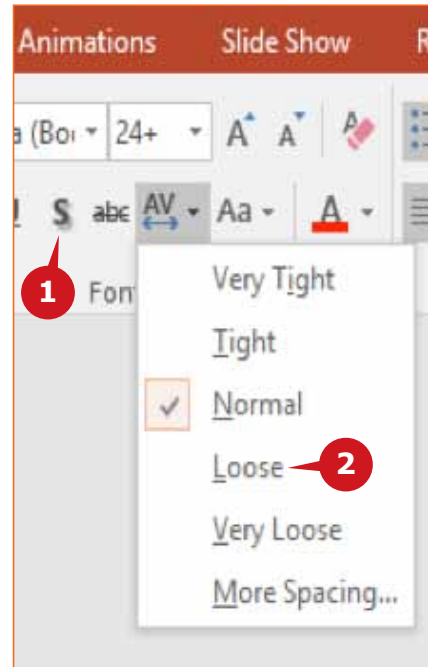
CHANGE CASE AND CLEAR FORMATTING

The Change Case command enables you to change the text to upper, lower and other capitalizations. While the Clear All Formatting command enables you to remove all applied formatting from the text.

To use the Change Case command for the selected text, follow the steps given below:

1 Click on the Change Case command from the Font group.

2 Choose the desired case from the drop down list.

To clear all formatting from the selected text,

3 Click on the Clear All Formatting command from the Font group.
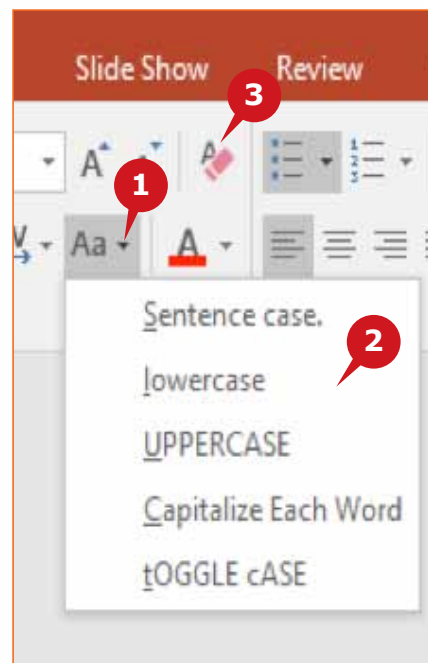
PARAGRAPH GROUP

The Paragraph group of the Home tab contains the commands to set the alignment, text direction, and line spacing of the paragraphs. It also has the commands for creating a bulleted or numbered list.

HORIZONTAL TEXT ALIGNMENT

The Left, Right, Center and Justify commands allow you to align text horizontally relative to the left and right margins of a text box.

A Align Left: This command is used to align the text to the left of the text box.

B Center: This command is used to align the text to the center of the text box.

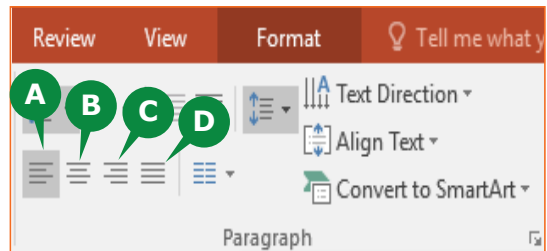**C** Align Right: This command is used to align the text to the right of the text box.

D Justify: This command is used to distribute the text evenly between the margins of the text box.

VERTICAL TEXT ALIGNMENT

The Align Text command is used to align the text vertically relative to the top and bottom margins of the text box. You can align the text vertically at the top, middle or at the bottom of the text box.

To align the text vertically in the selected text box, follow the steps given below:

1 Click on the Align Text command from the Paragraph group.

2 Choose the desired alignment option from the dropdown list.

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CREATING A BULLETED OR NUMBERED LIST

While creating a presentation, it is recommended to use key points of the information instead of using lengthy paragraphs. The key points can be emphasized by creating bulleted or numbered lists.
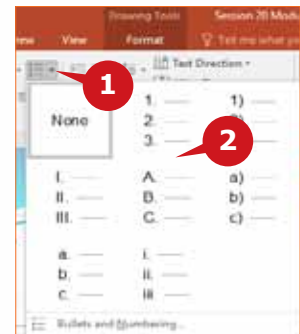
To create a **bulleted** list for the selected text, follow the steps given below:

1 Click on the arrow of the Bullets command from the Paragraph group.

2 Select the desired Bullet style from the drop down list.

To create a numbered list for the selected text, follow the steps given below:

1 Click on the arrow of the Numbering command from the Paragraph group.

2 Select the desired Numbering style from the drop down list.

INCREASE/DECREASE LIST LEVEL

You can create multilevel bulleted or numbered lists using the Increase List Level or Decrease List Level commands of the Paragraph group.

To increase list level of the selected text,

1 Click on the Increase List Level command from the Paragraph group.
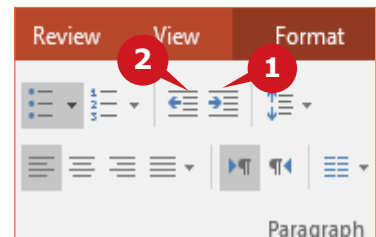
To decrease list level of the selected text,

2 Click on the Decrease List Level command from the Paragraph group.

TEXT DIRECTION

The Text direction in a text box can be set in different ways, such as rotate 90^0, rotate 270^0, or stacked.

To change the text direction of the selected text, follow the steps given below:

1 Click on the Text Direction command from the Paragraph group.

2 Choose the desired text direction from the drop down list.

DRAWING GROUP

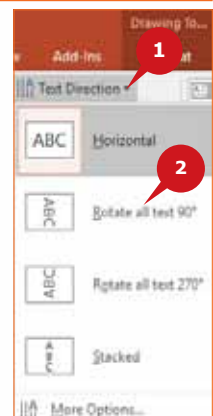The commands in the Drawing group of the Home tab enable you to draw shapes, insert images, and enhance objects in the slide. In this section, you will learn about the Shapes Gallery, Quick Styles, and Shapes formatting.
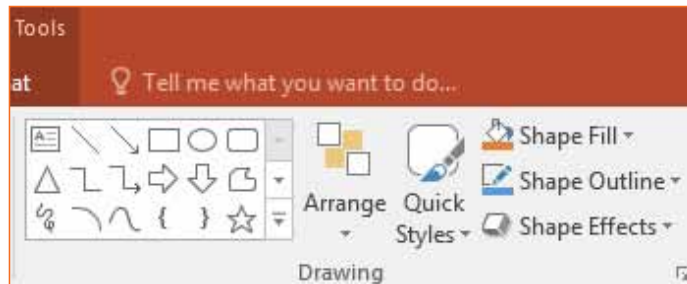
INSERTING SHAPES

The Shapes gallery in the Drawing group enables you to insert a variety of shapes in your presentation.

To insert a Shape, follow the steps given below:

1 Click More arrow of the Shapes gallery from the Drawing group.

2 Select the desired shape. The mouse pointer changes to a plus (+) sign. Click on the slide to insert the shape with the default size.

A Top (or Bottom) handle: It is used to increase or decrease the height of the shape.

B Left (or Right) handle: It is used to increase or decrease the width of the shape.

C Rotating handle: It is used to rotate the shape.
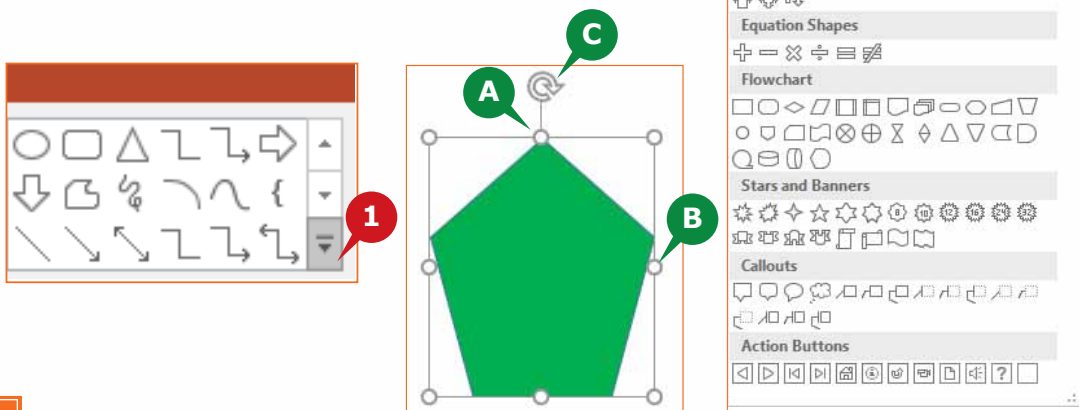
TIP

When you insert a shape, a new contextual Format tab appears. You may use the various options available to enhance the appearance of the shape.

USING QUICK STYLES

The Quick Styles command enables you to apply theme styles to shapes, placeholders and text boxes, whereas the Shape Fill command allows you to change the background of the shape.

To apply the Quick Styles, follow the steps given below:

1 Select the shape and click on the Quick Styles command from the Drawing group.

2 Select the desired style from styles gallery.

To change the background of the selected shape, follow the steps given below:

3 Click on the Shape Fill command from the Drawing group.

4 Choose the Texture option from the drop down list.

5 Select the desired texture style from the list.
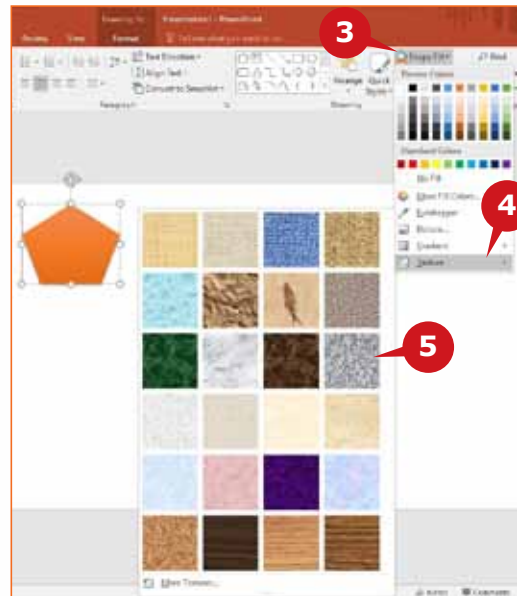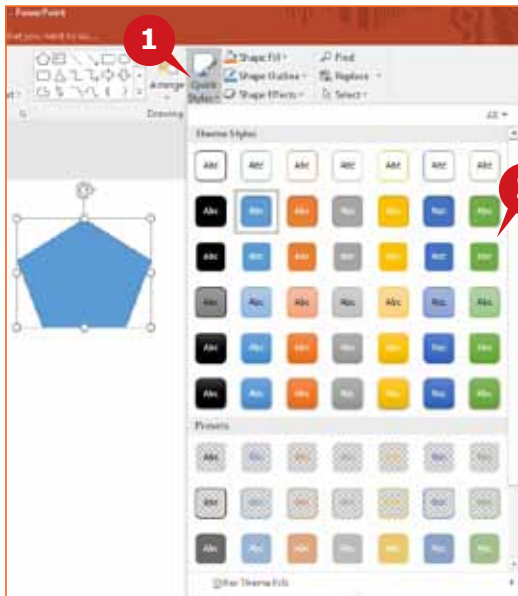
APPLYING SHAPE OUTLINE AND SHAPE EFFECTS

The Shape Outline command allows you to add an outline to a shape with different line weight and colors. The Shape Effect command allows you to apply visual effects to a shape such as shadow, reflection, 3D rotation.

To apply the Shape Outline to the selected shape, follow the steps given below:

1 Click on the Shape Outline command from the Drawing group.

2 Select the desired outline color for the shape from the palette.

3 Point to the Weight option and choose the desired weight point from the list.

To apply the Shape Effects to the selected shape, follow the steps given below:

4 Click on the Shape Effects command from the Drawing group.

5 Point to a Shape Effect option and choose the desired Effect from the list.
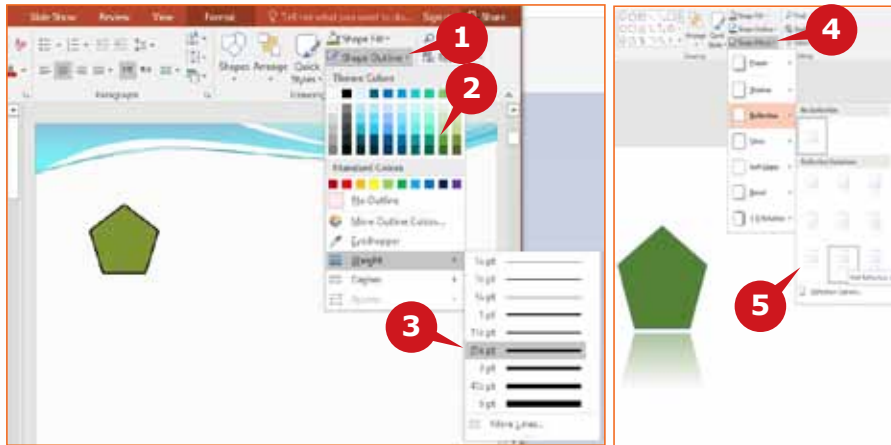
EDITING GROUP

The commands in the Editing group of the Home tab help you to find and replace text. It further allows you to hide or show objects in the presentation.

FIND AND REPLACE TEXT

The Replace command helps you to replace a particular text or phrase with another text or phrase.

To find and replace the text throughout the presentation, follow the steps given below:

1 Click on the Replace command from the Editing group.

A The Replace dialog box appears.

2 Enter the text in the Find what: box.

3 Enter the text in the Replace with: box with what you want to replace the searched text with.

4 Click on the Find Next button to search and locate the text.

5 Click on the Replace All button.

SELECTING OBJECTS

The Select command is especially useful to select objects that are behind text or other objects in the slide. You can select all or particular objects in a slide.

To select all objects in a slide, follow the steps given below:

1 Click anywhere in the Slide Area and click on the Select command from the Editing group.

2 Click on the Select All option from the list.
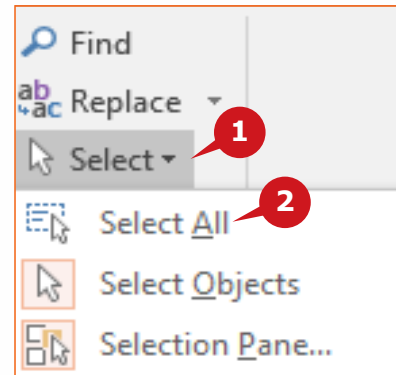
TIP

To select multiple objects, keep the **Ctrl** *key pressed and click on objects from the selection pane.*

USING THE SELECTION PANE

PowerPoint 2016 allows you to temporarily hide certain objects in a slide, enabling you to work on other overlapping objects. You can even select objects using the selection pane.

To hide the objects, follow the steps given below:

1 Click on the Select command from the Editing group.

2 Click on the Selection Pane option from the list.

3 Click on the hide/show button.
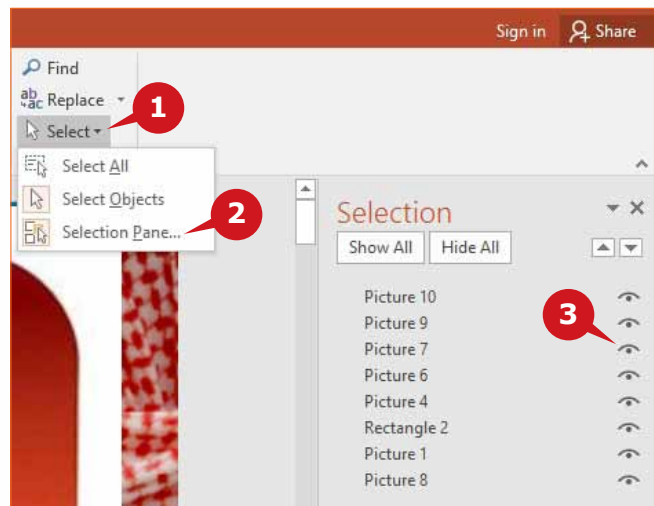
ACTIVITIES

Activity | **1**

Choose the correct option for the following statements.

1. You can change the layout of an existing slide by using the _____ command.
   - a. New slide
   - b. Layout
   - c. Reset
   - d. New Layout

2. The _____ command is used to change the spaces between the characters.
   - a. Text Spacing
   - b. Text Shadow
   - c. Clear Spacing
   - d. Character Spacing

3. The _____ command is used to align the text vertically in a textbox.
   - a. Text Direction
   - b. Justify
   - c. Align Text
   - d. Align Left

4. The _____ pane is used to temporarily hide the objects in a slide.
   - a. Slide
   - b. Thumbnails
   - c. Selection
   - d. Hide

Activity 2

Fill in the blanks with the appropriate words provided in the box.

Section	Quick Styles	New Slide	Formatting	Slide Layout

1. The _____command is used to insert a slide after the active slide.

2. The _____ command is used to organize the slides into meaningful groups.

3. You can use the Clear All Formatting command to remove all _____ from the text.

4. The _____ command is used to apply various styles to selected shapes, placeholders and text boxes.

Activity 3

Practice the following tasks on your computer.

1. Create a presentation with 5 slides. Change the layout of slide 3 to "Title Only" and add the title "King Saud University".

2. Enter the text "Welcome" as the title to the slide 1 and apply the text effect "Text Shadow" and character spacing "Loose".

3. Enter the random sample paragraph as a subtitle by typing the "=rand()" function in slide 2. Change the alignment of the paragraph to "justify".

4. Insert the shape "sun" in the center position of the slide 4 and Change the Shape Fill color to "orange".
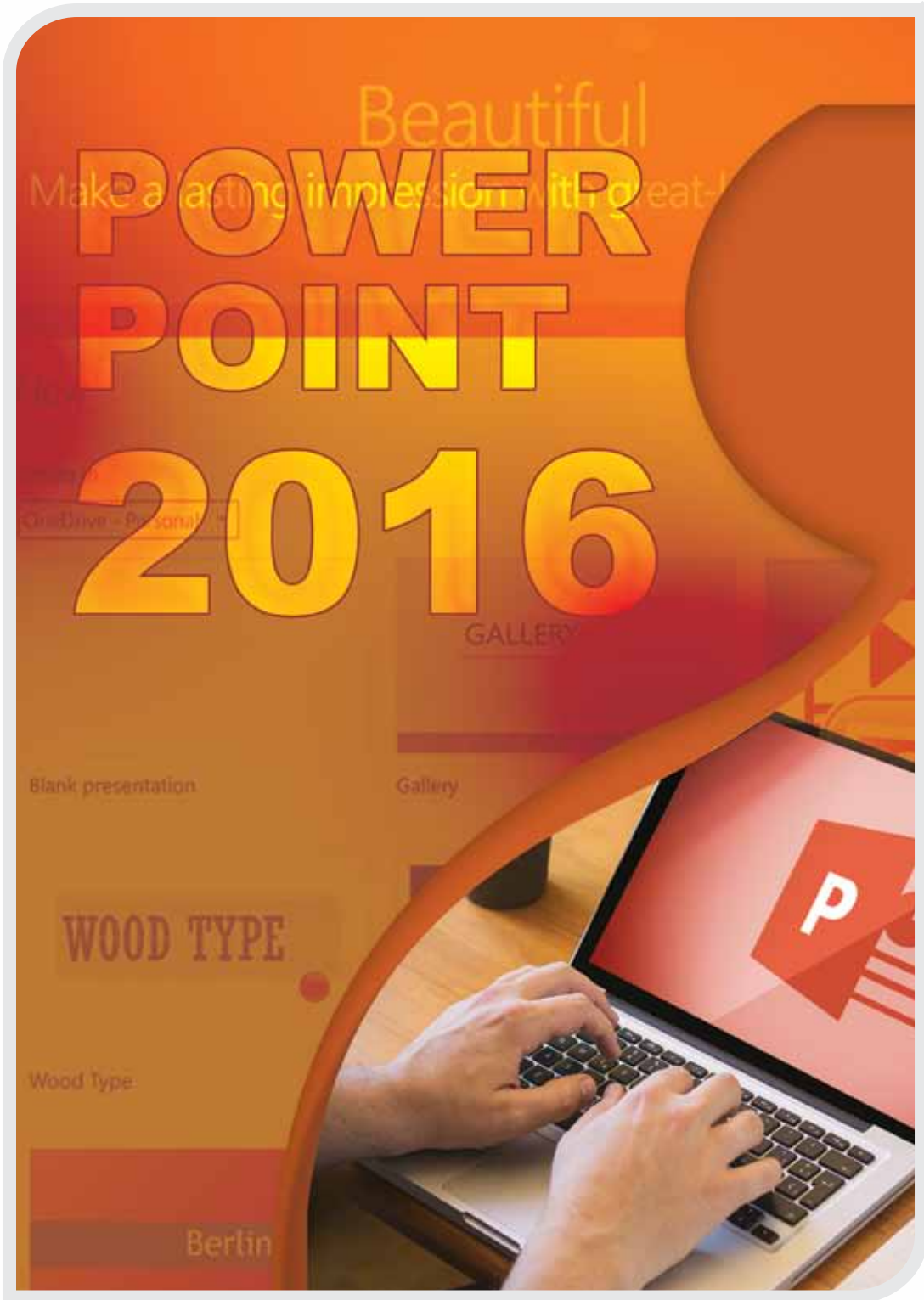
Session 22

THE INSERT TAB AND THE DESIGN TAB

OBJECTIVES

General Objectives

In this session, you will learn about Tables, Links, Text, Media groups of the Insert Tab and Themes, Customize groups of the Design Tab.

Specific Objectives

At the end of this session, you should be able to understand and Practice:

- **The Insert Tab**
  - Tables Group
  - Links Group
  - Text Group
  - Media Group

- **The Design Tab**
  - Themes Group
  - Customize Group

LEARNING

THE INSERT TAB

The Insert tab contains the commands that enable you to insert hyperlinks, tables, pictures, shapes, audio, and video, etc. It also enables you to add the screen recording to your presentation. In this section, you will learn about the following groups:

A Tables Group
B Images Group
C Links Group
D Text Group
E Media Group

TABLES GROUP

The Tables group has only the Table command which you can use to insert a table in your slides.

INSERTING A TABLE

The **Table** command enables you to insert a table either by specifying or selecting the number of rows and columns in a slide.

To insert a Table, follow the steps given below:

1 Click on the Table command from the Tables group.

2 Select the number of rows and columns by moving the mouse pointer over the table grid.

A The Insert Table option enables you to manually specify the number of rows and columns in the table.
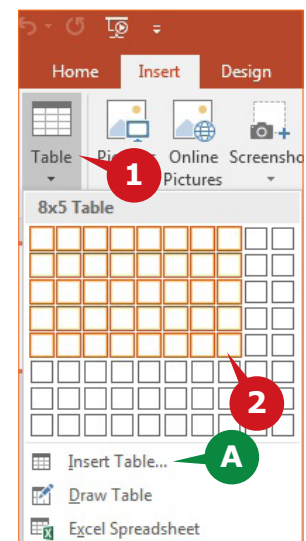
LINKS GROUP

The commands in the Links group of the Insert tab enable you to create links and assign actions to the objects or text in a slide.

INSERTING HYPERLINK

Sometimes the presentations include **URLs** of websites that provide additional information related to the topic. The Hyperlink command allows you to create links to the websites, other files, or other slides in the same presentation. When you run a slide show, the links can be directly accessed from the presentation.
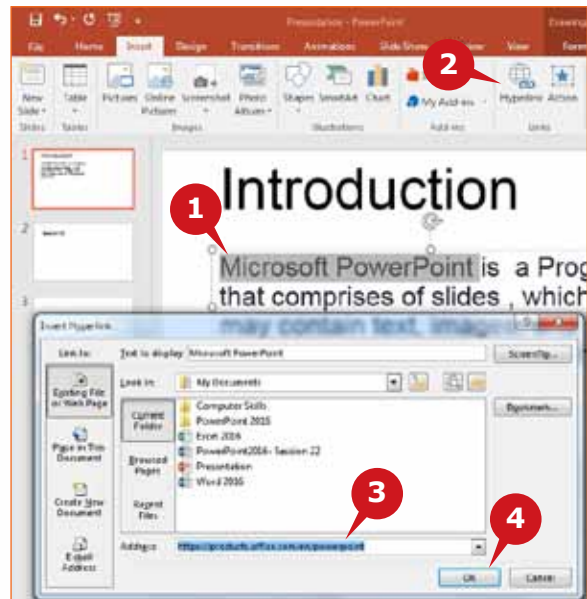
To insert a hyperlink to a text, follow the steps given below:

1. Select the text to which you want to insert a Hyperlink.
2. Click on the Hyperlink command from the Links group.
3. In the Insert Hyperlink dialog box, enter the URL in the Address box.
4. Click the OK button.

ASSIGNING ACTIONS

The **Action** command is used to add action to an object, when you **click** on it or **mouse over** it. The action could be jump to another slide, playing a sound, or opening another program while running the slide show.

To assign an action to a selected object, follow the steps given below:

1. Click on the Action command from the Links group.
2. Click on the Mouse Click tab from the Action Settings dialog box.
3. Select the Hyperlink to: option.
4. Select the desired hyperlink method from the drop down list.
A. Enable the play sound option.
5. Click on the OK button.
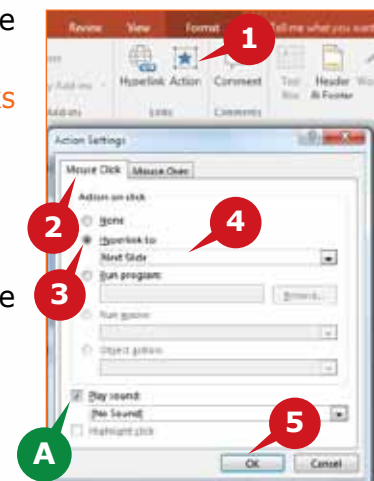
TEXT GROUP

The commands in the Text group of the Insert tab enable you to insert Text Box, Header & Footer, etc. to the slides.

INSERTING TEXT BOX

In PowerPoint 2016, you need text placeholder or text box to enter text in slides. The Text Box command enables you to add text box anywhere in a slide.

To add a Text Box to a slide, follow the steps given below:

1. Click on the Text Box command from the Text group.
2. Click and drag to draw a text box of desired size in the slide.

INSERTING HEADER & FOOTER

Header or Footer are standard text that might include the company name, copyright symbol, date and time, etc. Normally, only Footer is inserted to the slides. However, both Headers and Footers can be added to your Handouts and Notes Page slides.

To Insert Footer to a slide, follow the steps given below:

1. Click on the Header & Footer command from the Text group.
2. Click the Footer check box.
3. Enter the desired text in the Footer box.
A. The Date & Time check box inserts date and time in the footer.
B. The Update automatically option updates the date & time when you open the presentation.
C. The Slide number check box inserts slide numbers in the Footer.
D. The Don't show on title slide check box allows you to skip the Footer on the title slide.
4. Click on Apply to All button if footer is required on all the slides.
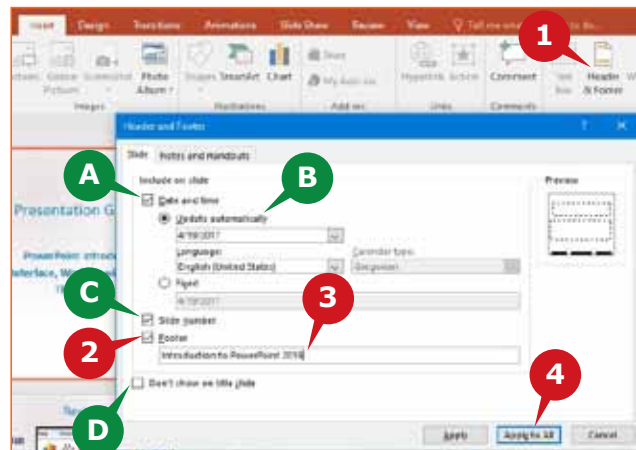
MEDIA GROUP

The commands in the **Media** group of the Insert tab enable you to insert video and audio files in the presentation. Adding videos and audios in a presentation help you to deliver the information easily and efficiently.
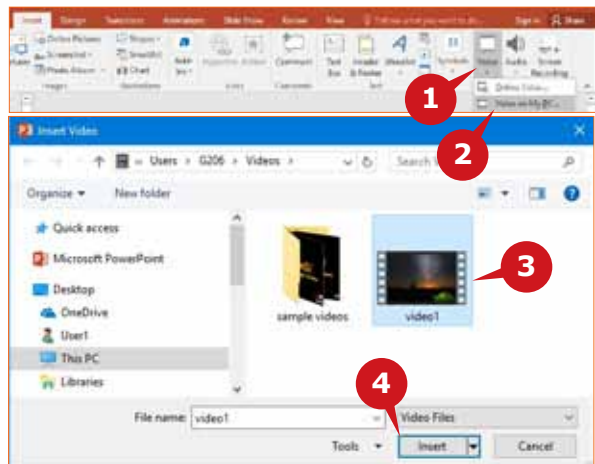
INSERTING VIDEO

Inserting a video to the presentation enables the presenter to show relevant and important information in a movie format. The Video command enables you to insert online videos or videos stored on your PC to the presentation.

To insert a Video from your PC, follow the steps given below:

1. Click on the Video command from the Media group.
2. Click on Video on My PC option from the drop down list.
3. In the Insert Video dialog box, browse and select the video you want to insert to the presentation.
4. Click on the Insert button.

TRIMMING VIDEO

You can use the Trim Video command to remove the unwanted parts of a video clip. The Trim Video command helps you to reduce the duration of the inserted video by specifying the start and the end time.

To trim a video inserted in the presentation, follow the steps given below:

1. In the contextual Playback tab, click on the Trim Video command from the Editing group. Trim Video dialog box appears.
2. Click and drag the green slider present at the beginning of the bar to set the new start point of the video.
3. Click and drag the red slider present at the end of the bar to set the new end point of the video.
4. Click on OK button.
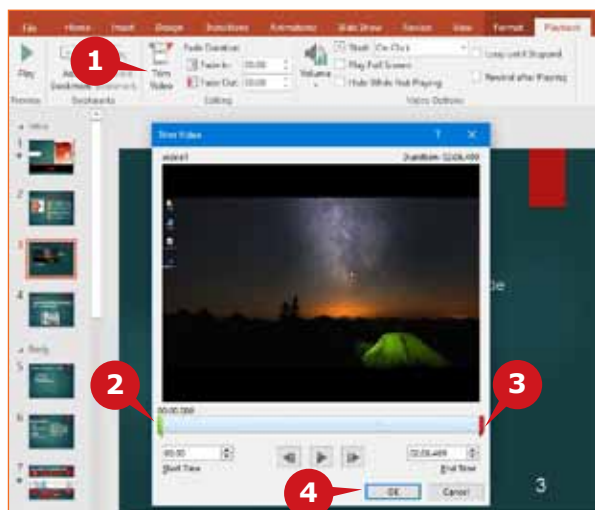
INSERTING AUDIO

Inserting an Audio file in a presentation enhances the delivery of presentation. Unlike video files, audio files are smaller in size and makes the sharing of presentation faster. The Audio command allows you to insert an audio file available on your PC or to record a new audio.

To Insert an Audio file from your PC, follow the steps given below:

1. Click on the Audio command from the Media group.
2. Choose the Audio on My PC option from the drop down list.
3. In the Insert Audio dialog box, browse and select the audio file you want to insert into the presentation.
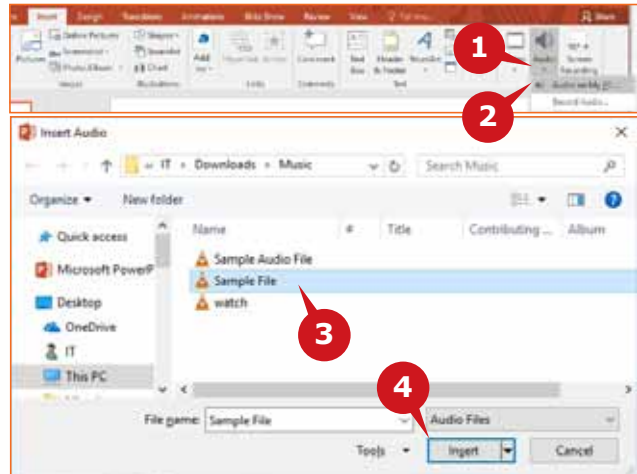4. Click on the Insert button.

SCREEN RECORDING

Screen Recording command enables you to **record** the activities on the **screen** along with the **Audio.** The screen recording can be inserted as a video to any slide and can be viewed during the slide show.

To insert a screen recording in the slide, follow the steps given below:

1. Click on the Screen Recording command from the Media group.
2. In the Screen Recording Toolbar, click on the Select Area button to set the screen area for recording.
   A. By default, the Audio option is enabled for the recording.
   B. By default, Record pointer option is also enabled for the recording.
3. Click on the Record button to start screen recording.

To stop recording, press Windows + Shift + Q keys.
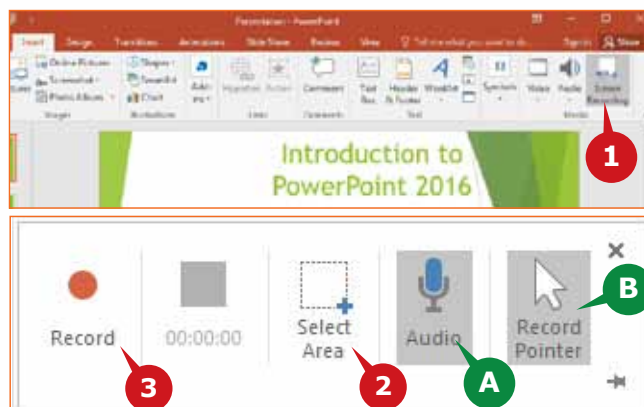
THE DESIGN TAB

The Design Tab commands allow you to control the look and the appearance of your presentation. You can apply a theme from the available themes and can also change the color schemes.

A Themes group
B Variants group
C Customize group

THEMES GROUP

Themes are used to simplify the process of creating professional presentations. Applying a new theme changes the look of your presentation such as the colors, font styles, effects, layouts and background of your slides. If you want to customize your presentation further, you can change the theme colors, theme fonts, or theme effects.

APPLYING THEMES

The Themes gallery contains a variety of themes having built in font colors, font effects, layouts and backgrounds.

To apply a Theme to the slides, follow the steps given below:

1 Click on the More Themes down arrow button of the Themes gallery.
2 Select the desired Theme from the drop down themes gallery.

Session 22

APPLYING THEME VARIANTS

Variants gallery enables you to change the color combination, fonts styles, effects and background styles of the theme that you have selected.

To apply a Theme Variant to the slides, follow the steps given below:

1 Click on the More Variants down arrow button of the Variants gallery.

2 Point to the Colors option from the drop down list.

3 Select the desired color combination from the displayed list.
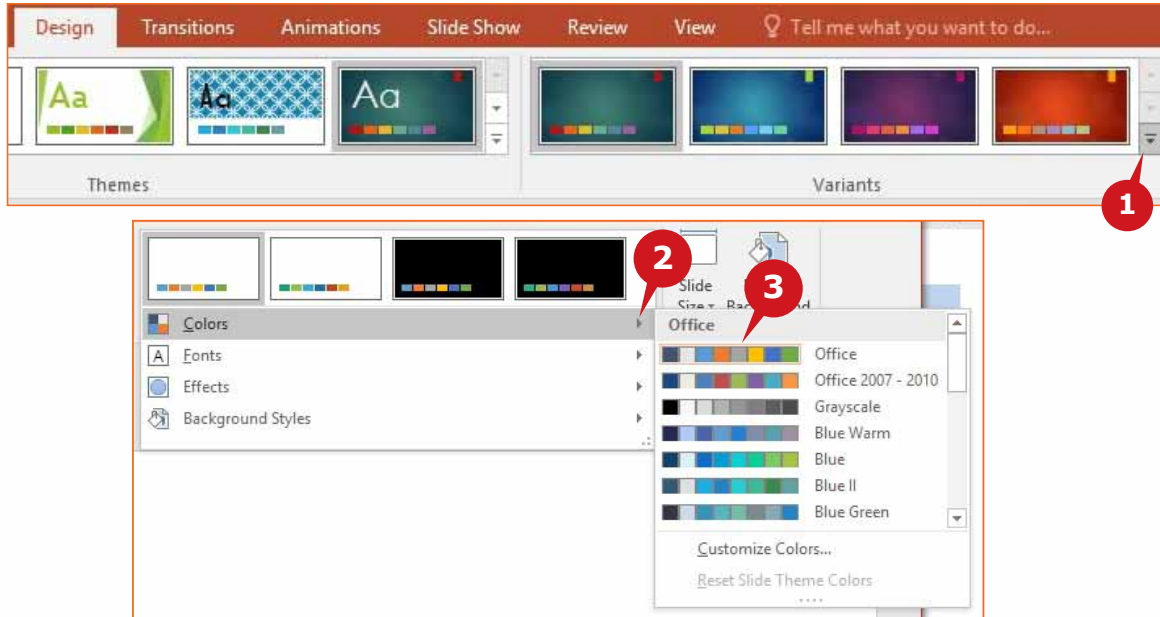
CUSTOMIZE GROUP

The Customize group of the Design tab contains the commands to change the slide size and formatting the slide background.

## CHANGING THE SLIDE SIZE

Changing the slide size is important depending on the way the presentation is viewed. The slide size can be set to Standard (4:3), Widescreen (16:9), A4 Paper, Overhead, Banner, etc.

To Change the Slide Size, follow the steps given below:

1 Click on the Slide Size command from the Customize group.

2 Click on the Customize Slide Size option from the dropdown list.

3 Select the suitable slide size from the Slides sized for drop down list.

A Select the Orientation for the slide from the options.

B Select the Orientation for notes, handouts & outline view slides.

4 Click the OK to apply the changes.
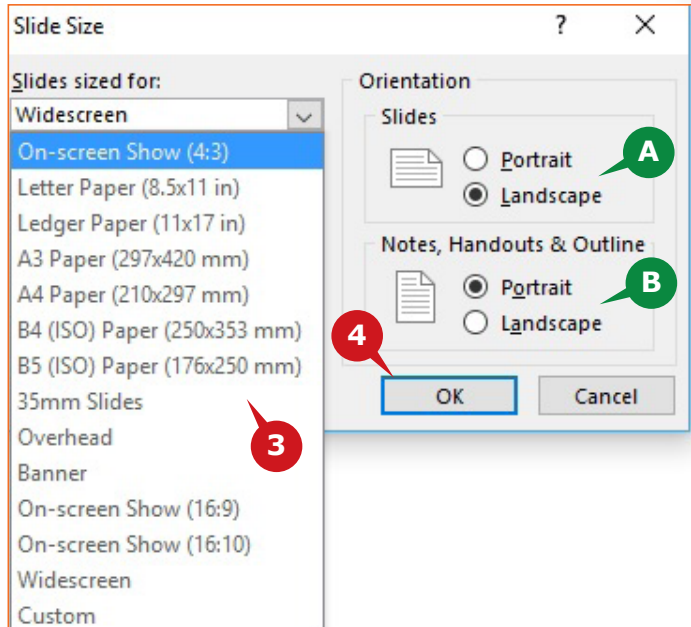
FORMATTING SLIDE BACKGROUND

The Format Background command enables you to fill the slide background with a Color, Picture, Texture or Pattern.

To change the slide background, follow the steps given below:

1 Click on the Format Background command from the Customize group. The Format Background pane appears in the right.

2 Click on the Solid fill option.

3 Click on the Fill Color button to choose the desired color.
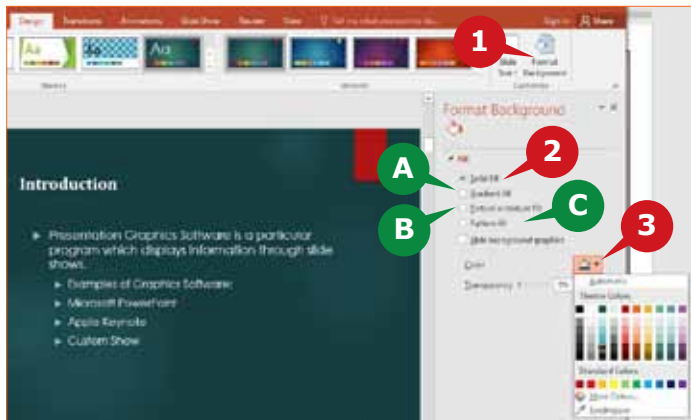
A Choose the Gradient fill option to select the gradient color and design.

B Choose the Picture or texture fill option to insert a Picture as the slide background.

C Click on Pattern fill option to insert different pattern styles as the slide background.

ACTIVITIES

Activity **1**

Choose the correct option for the following statements.

1. The _____ command is used to jump to another slide, or opening another program during a slideshow.

    a. Comment

    b. Table

    c. Action

    d. SmartArt

2. The _____ command is used to remove the unwanted parts of a video clip.

    a. Video Effects

    b. Corrections

    c. Trim Video

    d. Hide Video

3. Keyboard shortcut to stop the recording of screen activities is _____.

    a. Ctrl + Shift + Q

    b. Windows + Shift + Q

    c. Windows + Shift + R

    d. Windows + Ctrl + Q

4. The _____ command enables you to apply a different background color to slides.

    a. Slide Color

    b. Format Slide

    c. Format Background

    d. Slide Fill

Activity 2

## Fill in the blanks with the appropriate words provided in the box.

Insert Video	Screen Recording	Theme	Hyperlink	Insert Table

1. The _____ option enables you to manually specify the number of rows and columns in the table.

2. The _____ command is used to access websites directly from the presentation.

3. The _____ command changes the look of your presentation such as the colors, font styles, effects, layouts and background.

4. You can use the _____ command to record your computer screen along with the related audio.

Activity 3

Practice the following tasks on your computer.

1. Create a new blank presentation with 5 slides. Type the text "Class schedule" in slide 1 and hyperlink this text to slide 3.

2. Enter your weekly class schedule details using the Table command in slide 3 and apply the table style "Themed style 1-Accent 5".

3. Change the presentation theme to "Facet".

4. Enter the text "King Saud University" as footer and apply it to all the slides in the presentation.
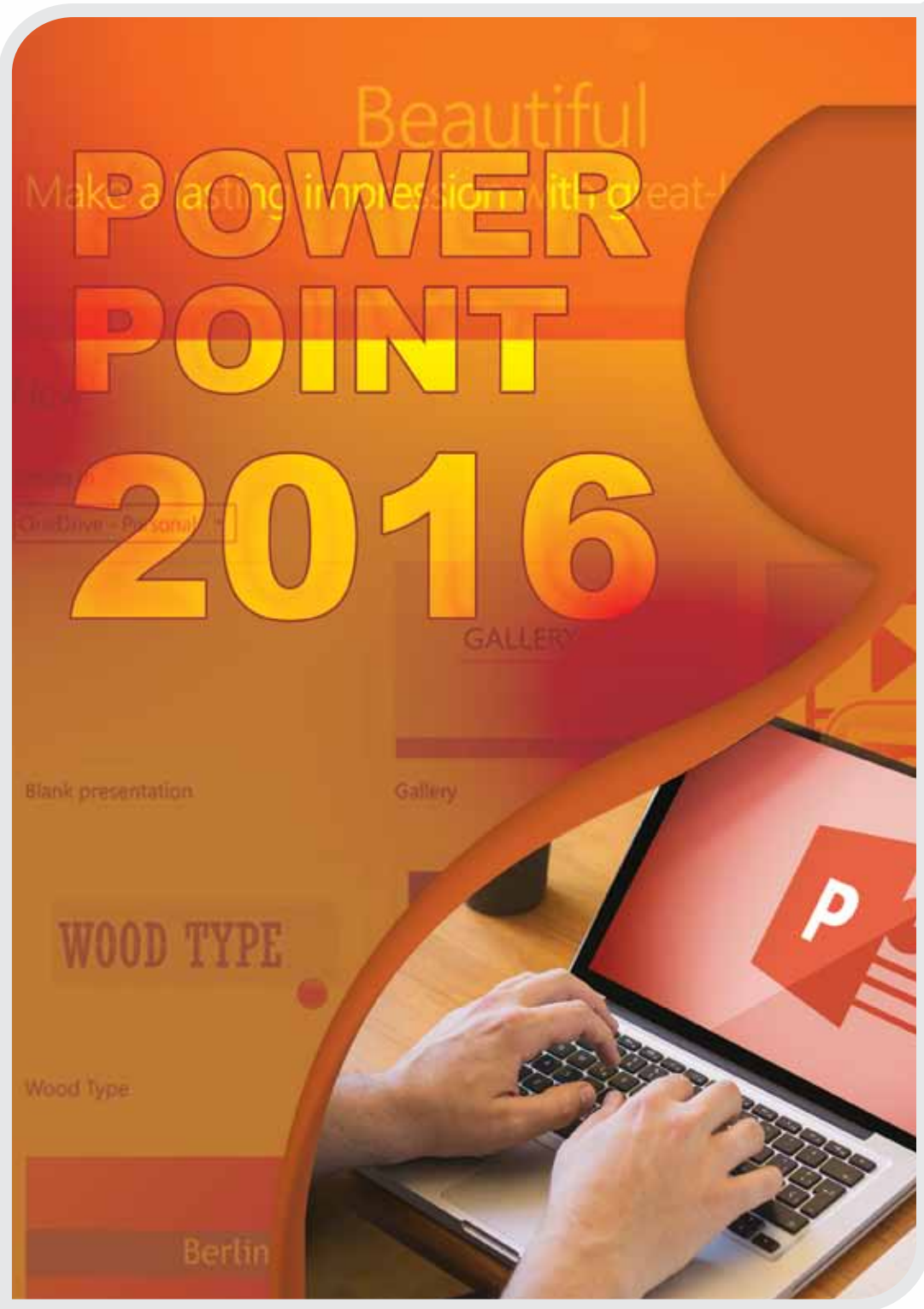
Session 23

THE TRANSITIONS TAB, THE ANIMATIONS TAB, THE SLIDE SHOW TAB AND THE VIEW TAB

OBJECTIVES

General Objectives

In this session, you will learn about the Transitions, Animations, Slide Show and View Tabs of PowerPoint 2016.

Specific Objectives

At the end of this session, you should be able to understand and Practice:

- **The Transitions Tab**
  - Transition to This Slide Group
  - Timing Group

- **The Animations Tab**
  - Animation Group
  - Advanced Animation Group
  - Timing Group

- **The Slide Show Tab**
  - Start Slide Show Group
  - Set Up Group

- **The View Tab**
  - Presentation Views Group
  - Master Views Group

LEARNING

THE TRANSITIONS TAB

Slide transitions are a classic element in PowerPoint that goes way back to its earliest versions. Slide transitions are the animation-like effects that occur when you move from one slide to the next during a presentation. You can control the speed, add sound, and customize the properties of transition effects.

TRANSITION TO THIS SLIDE GROUP

This group consisits of a Transition gallery that contains built-in transition effects. Each transition has different options to make the transition more flashy and eye catching.

APPLYING TRANSITIONS

Transition enhance the moving between the slides during a presentation. You can easily apply the same transition to all the slides including its effect options.

To apply the Transition, follow the steps given below:

1 Click on the More arrow of Transition gallery.

2 Select the desired transition from the displayed gallery.

To preview the applied transition,

**3** Click on the Preview command from the Preview group.
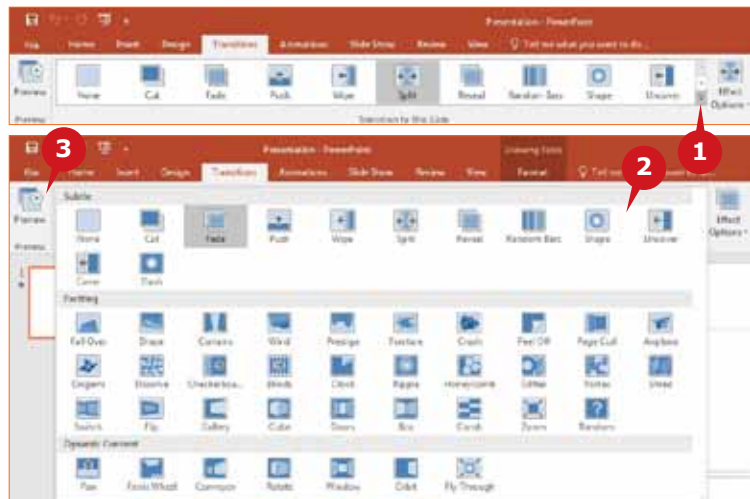
EFFECT OPTIONS

The Effect Options command enables you to change the properties of the applied transition. You can change the way the transition occurs – for example, the entrance direction of the slide.

To change the Effect Option for the selected transition, follow the steps given below:

1 Click on the Effect Options command.

2 Choose the desired effect from the list that appears.
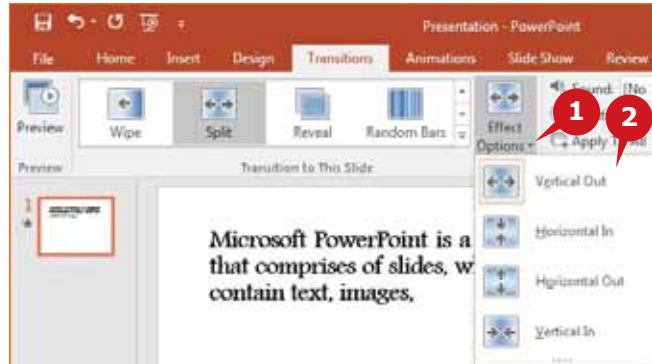
TIMING GROUP

Timing group of the Tranistion tab contains the commands that enable you to specify the duration of the transition and transition sounds and to control the slide entrance.

DURATION AND SOUND EFFECTS

You can set the time duration to specify how fast the transition should occur. For example, to make the transition go slower, you can set a higher time duration.

To set the time duration of the applied transition,

1 Increase or decrease the time duration using the buttons of the Duration box from the Timing group.

To apply a Sound effect to the applied transition,

2 Select a suitable sound effect by clicking on the Sound box from the Timing group.

**A** The Apply to All button applies the transition settings to all the slides in the presentation.
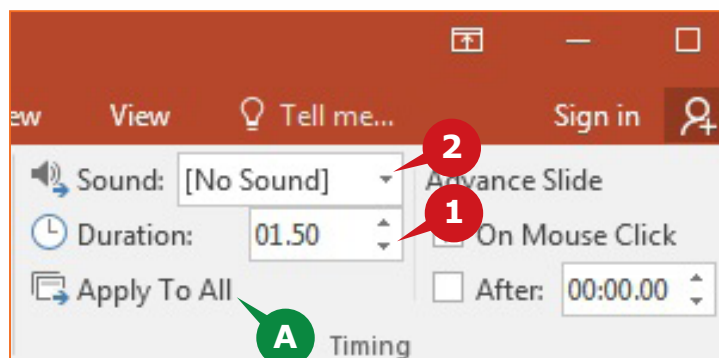
ADVANCE SLIDE

You can specify whether to move to the next slide on mouse click or automatically after a specified time.

To change the Advance Slide settings, follow the steps given below:

1 Select the On Mouse Click check box to move to the next slide on mouse click.

2 Select the After check box and specify the slide advance time using the buttons.
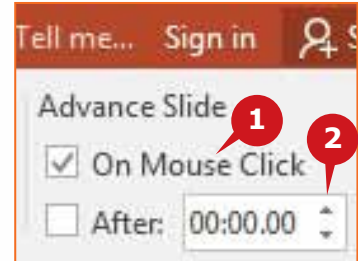
THE ANIMATIONS TAB

Animation refers to the special visual or sound effects that are applied to the objects of the slides. It is a great way to focus on important points, to control the flow of information, and to increase viewer interest in your presentation. An Animations tab is almost the mirror image of the Transitions tab. However, it contains the effects for objects instead of slides.
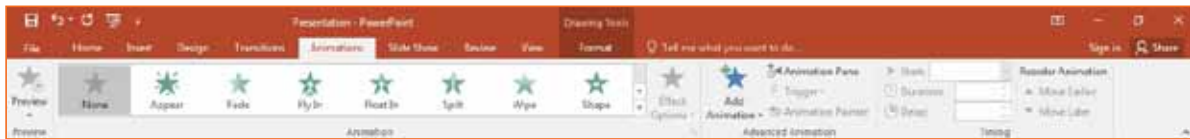
ANIMATION GROUP

The Animation group contains four categories of animation effects such as Entrance, Emphasis, Exit, and Motion Paths. Each category contains different animation effects that can be applied to the objects on the slides.

APPLYING ANIMATION EFFECTS

The Animation gallery provides you a lot of exciting animation effects for the text, pictures, shapes, and other objects in your presentation. You can also set an animation effect of the bullet points so that they appear one by one or at once.

To apply an Animation to the selected object, follow the steps given below:

1 Click on the More arrow of the Animation gallery.

2 Select the desired Animation effect from the displayed gallery.

To change the Effect option of the selected object, follow the steps given below:

3 Click on the Effect Options command.

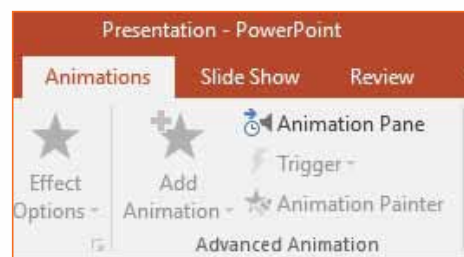**4** Select the desired option from the drop down list.

To preview the applied animation effect,

5 Click on the Preview command from the Preview group.

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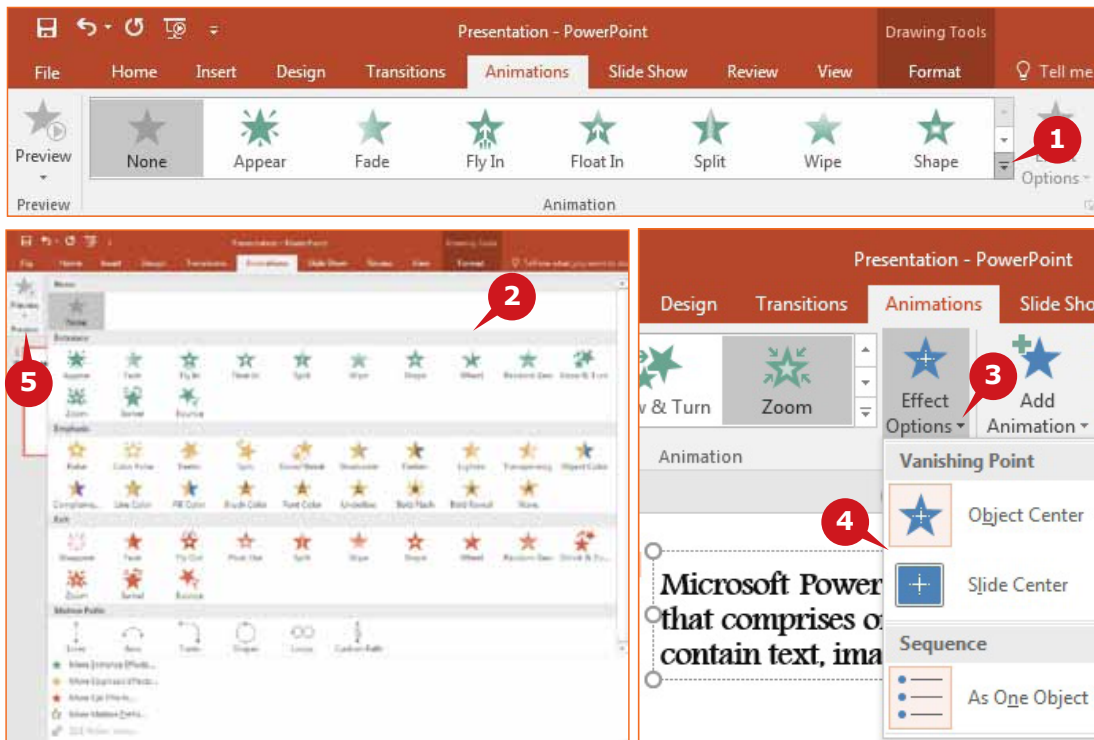
ADVANCED ANIMATION GROUP

The Advanced Animation group has the commands that allows you to add more animations to an object and to show the Animation pane where you can view or edit the animations.

ADDING MORE ANIMATIONS

You can add multiple animations to an object which occurs as per the desired order. The Add Animation command in the Advanced Animation group enables you to add a new animation after an existing one.

To add more animations to the selected object, follow the steps given below:

1 Click on the Add Animation command from the Advanced Animation group.

2 Choose the desired Animation from the displayed gallery.
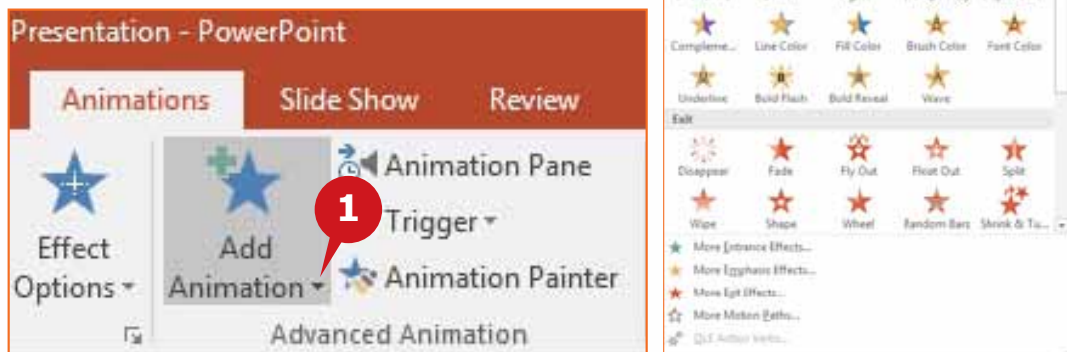
ANIMATION PANE

Animation Pane helps you to view and edit the applied animations of the objects. You can re-order or remove the applied animations using the Animation Pane.

To show the Animation Pane,

1 Click on the Animation Pane command from the Advanced Animation group.

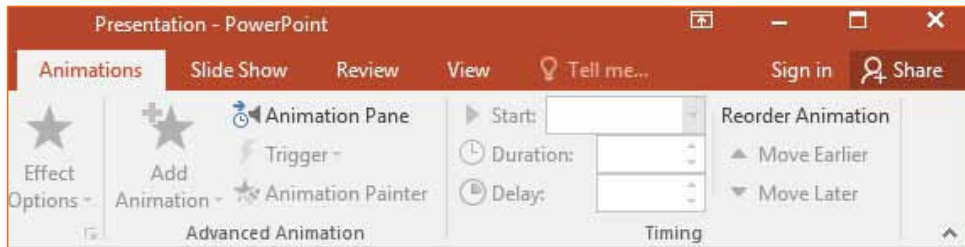**A** Animation Pane appears to the right of the screen.

To remove an Animation, follow the steps given below:

2 Click on the arrow button of a Content Placeholder in the Animation pane.

3 Click on the Remove option from the drop down list.

TIMING GROUP

The commands of the Timing group allow you to choose the order, delay and duration of the applied animations.


START AND REORDER ANIMATION

The Start command in the Animation group enables you to choose whether to start an animation **After Previous** animation, **On Click**, or **With Previous** animation.

To set the Start of an Animation of the selected object, follow the steps given below:

1 Click on the box of the Start command from the Timing group.

2 Choose the desired option from the drop down list.

To reorder an Animation,

3 Click on Move Earlier or Move Later command from the Timing group.
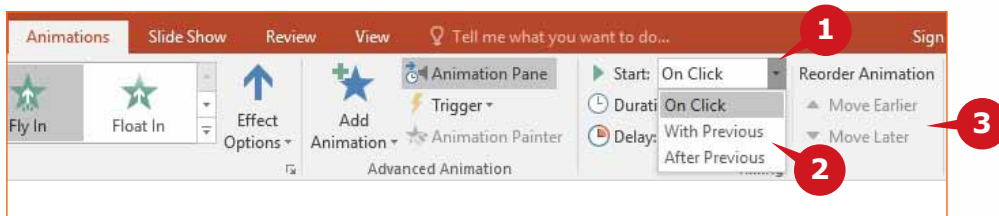
TIP

Animations can also be reordered using the mouse, by dragging the selected animation in the Animation Pane to the desired location.

THE SLIDE SHOW TAB

The Slide Show tab commands help you to control the way your presentation is displayed to the audience. This tab offers several commands and features to make your slide show smooth, engaging, and professional. Slide show tab is divided into three groups: Start Slide Show, Set Up and Monitors.


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START SLIDE SHOW GROUP

The commands of this group allow you to start the slide show either from the first or the current slide. It also enables you to setup customized slide shows.

STARTING A SLIDE SHOW

Slide Show displays a single screen of information showing text, images or other objects along with associated transitions and animations during a presentation. The Start Slide Show group contains the following commands:

A From Beginning: This command allows you to start the slide show from the first slide of the presentation.

B From Current Slide: This command allows you to start the slide show from the current slide of the presentation.
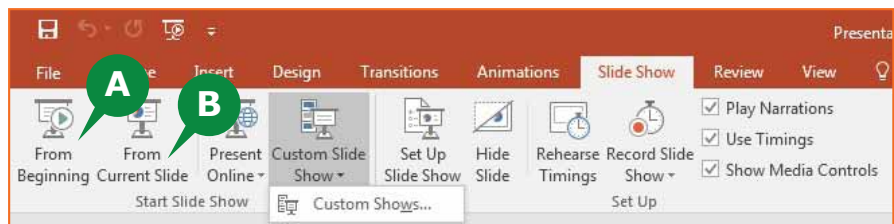
TIPS

Keyboard Shortcuts:

Slide show from beginning – **F5** key

Slide Show from current slide – **Shift + F5**

NAVIGATION IN THE SLIDE SHOW

You can use the Mouse or the Keyboard to navigate between the slides during the slideshow.

To Navigate during the slide show,

1 Click on the Left arrow button to move to the previous slide.

2 Click on the Right arrow button to move to the next slide.
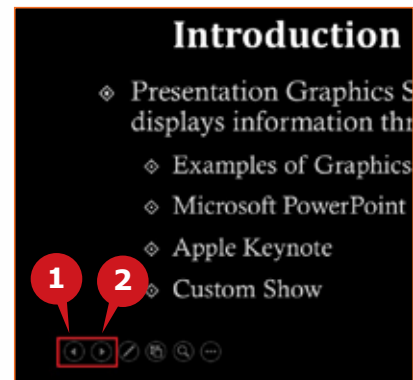
TIP

Use the Left or Up arrow keys to move to the previous slide and Right or Down arrow keys to move to the next slide during the slide show.

SETTING A CUSTOM SLIDESHOW

Custom Slide Show command allows you to create a customized slide show by choosing only the required slides of the presentation. This is a great way to shorten your presentation or alter it for different audiences.

To set a customized slide show, follow the steps given below:

1. Click on the Custom Slide Show command from the Start Slide Show group.
2. Click on the Custom Shows option that appears.
3. Click on the New button from the Custom Shows dialog box.
4. Choose the required slides from the Define Custom Show dialog box.
5. Click on the Add button to add only those slides that are required in the presentation.
6. Click on the OK button.
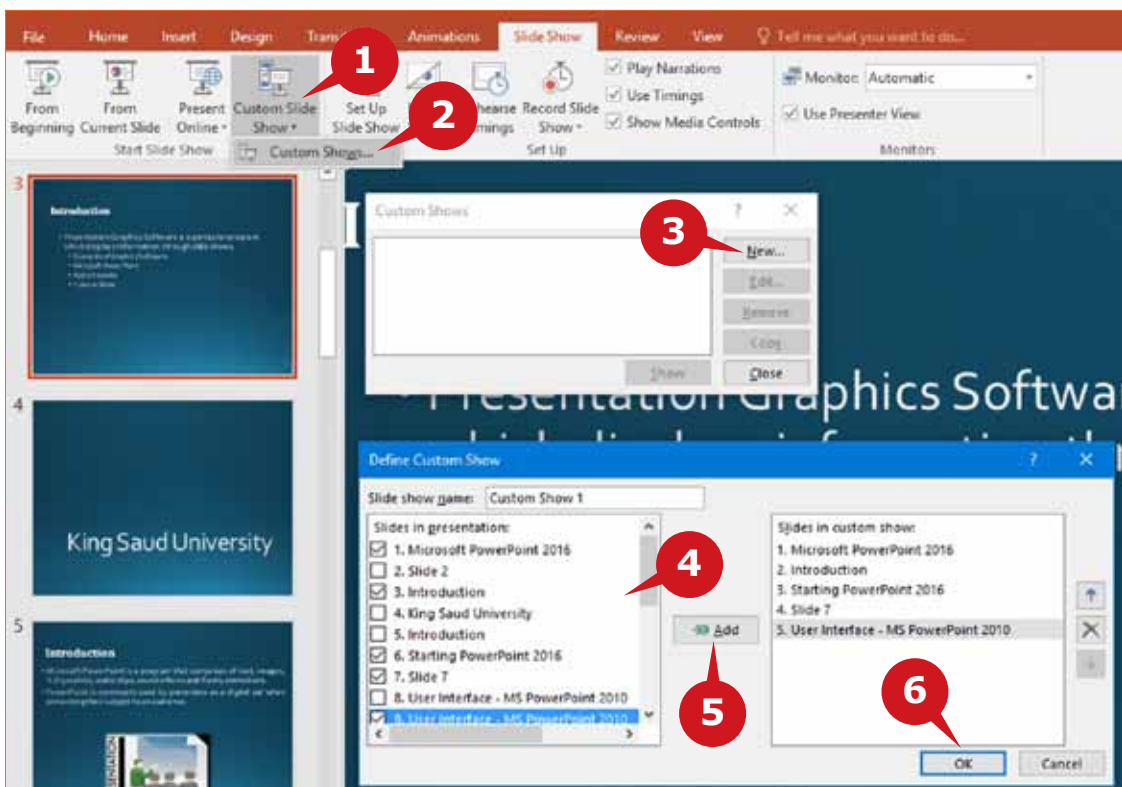
TIP

The **Hide** Slide command from the Set Up group is used to hide slides that you don't want to display during the slide show.

VIEW TAB

You can view your PowerPoint slides in a variety of ways depending on the tasks in hand. For example, the Normal view is suitable to create or design your presentation whereas the Slide Sorter View lets you view the thumbnails of all the slides in your presentation.
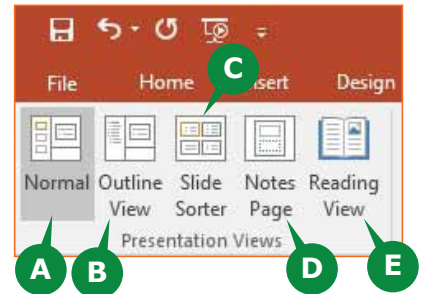

PRESENTATION VIEWS GROUP

By default, PowerPoint 2016 starts in the Normal View. You can change the view either from the Presentation Views group of the View tab or from the Status bar.

Following are the presentation views available in PowerPoint 2016:

A Normal View: This view is the main editing view where you can create and design your presentations.

B Outline View: This view is used to create an outline or story board for your presentation. It displays only the text on your slides, hiding the pictures or other graphical objects.

C Slide Sorter View: This view allows you to see your slides in thumbnail form, enabling you to sort and organize the sequence of your slides.

D Notes Page View: This view enables you to type notes related to the current slide in the notes pane, located below the slide.

E Reading View: This view enables you to play a slide show in the PowerPoint window to see the animations and transitions without switching to full screen slide show.

> **TIP**
>
> *You can use the different view buttons available on the status bar to switch to the desired view or to Show the presentation.*

MASTER VIEWS GROUP

The Slide Master view allows you to set the look of your entire presentation, which includes fonts, colors, backgrounds and effects. A Slide Master is designed to help you create visually appealing presentations with less efforts and time. You can set particular fonts or images (such as logos) to all your slides using the Slide Master.

CREATING A SLIDE MASTER

Slide Master command enables you to make changes to the slide master of your presentation. It is the top most slide in the thumbnails pane on the left side of the screen.

To insert an image in the Slide Master, follow the steps given below:

1 Click on the Slide Master command from the Master Views group.

A The presentation switches to the Slide Master view and the contextual Slide Master tab appears.

2 In the thumbnails pane, scroll up and select the first slide.

3 Click on the Insert tab, insert any picture on the first slide and move or resize as desired.

B Inserted Picture is moved and resized to the desired location

4 When you're finished, click on the Slide Master tab.

5 Click on the Close Master View command.

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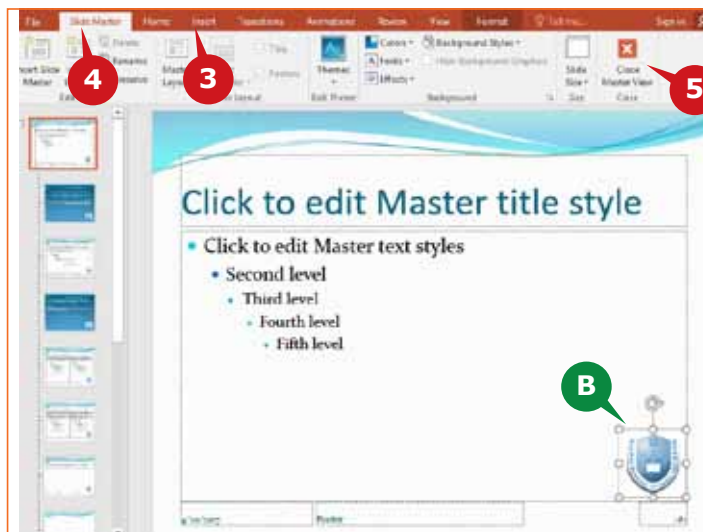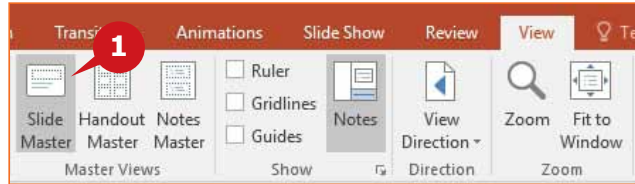
ACTIVITIES

Activity 1

Choose the correct option for the following statements.

1. _____ are the effects that occur when slides move from one slide to the next during the slideshow.

    a. Design

    b. Transitions

    c. Preview

    d. Slide Master

2. Keyboard shortcut to start slideshow from the first slide is _____.

    a. Shift + F5

    b. Ctrl + F5

    c. Alt + F5

    d. F5

3. _____is the main editing view, used to create and design your presentations.

    a. Outline View

    b. Reading View

    c. Normal View

    d. Outline View

4. You can set particular fonts or image to all your slides using the _____ command.

    a. Animations

    b. Transitions

    c. Preview

    d. Slide Master

Activity 2

Fill in the blanks with the appropriate words provided in the box.

Reading View	Animation Pane	Duration	Outline View	Animations

1. _____ option is used to increase or decrease the time length of a transition.

2. _____ are the special visual or sound effects that are applied to the objects of the slides.

3. _____ view is used to display only the text on your slides.

4. _____ helps you to view and edit the applied animations of the objects.

Activity 3

Practice the following tasks on your computer.

1. Create a new blank presentation with 3 slides. Add the transition effect "Push" to all slides in the presentation.

2. Insert the shape "sun" to the slide 2 and apply a "Wheel" entrance animation to it. Apply duration of 4 seconds and set effect option "2 Spokes".

3. Add an additional animation "Grow/Shrink" to the shape "sun".

4. Hide the slide 3 from the presentation and run the presentation in slide show view.

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