

# Chapter 8

## Windows 10




### 8- 1 What is the Operating System:

The Operating System (OS) is a set of computer programs that are responsible for running the computer and managing its various hardware and software components. The Operating System must be installed on the machine to be able to use it as the OS represents the connection between the user and the computer.

### 8- 2 The Main Tasks of the Operating System:

**Skill 8 - 1**  
Recognize the tasks of the OS




*The operating system has various tasks and functions, among these functions:*

- Starting the computer.
- Controlling all the hardware components from input, output, and storing units, etc.
- Transferring data among the different components of the computer and saving them on the storing units.
- Providing a user interface.
- Distributing the different roles on the computer users.
- Detecting and fixing the different system errors or faults.
- Securing the system and maintaining the security.
- Managing the tasks and giving priority to implementing tasks.
- Loading the running applications and programs to the RAM.

### 8 -3 Types of Operating Systems:

**Skill 8 - 2**  
Recognize the different types of OS



*There are different types of operating systems:*

- **Single-Task OS:** these operating systems allow the user to run one program at a time. An example of these operating systems is the Disk Operating System (DOS).
- **Multi-Tasking OS:** these operating systems allow the user to run more than one program at a time. An example of these operating systems is Windows 10.

- **Multiprocessing OS:** these operating systems are used for computers containing more than one processor and are characterized by their ability to distribute the tasks and processes on more than one processor to increase the efficiency of the computer to increase the processing speed. An example of these operating systems is the SUN-OS.
- **Time Sharing OS:** these operating systems are used for systems having more than one user each of which is connected to peripheral units (input and output) on the same computer. Each user is given a time interval to run his commands. An example of these operating systems is the Unix.
- **Real-Time OS:** these operating systems are used in systems requiring input and output at the same time for example in medical appliances, scientific laboratories, spacecrafts. An example of these operating systems is the RT Linux.
- **Networks OS:** these operating systems contain components that allow the computer to connect and serve another computer inside a particular network. An example of these operating systems is Windows Server 2008.

### 8 -4 Introduction to Windows 10:

Microsoft is considered as one of the leading software companies thanks to its production to various important software programs. Among its famous software programs and systems is Windows 10. Windows 10 is considered as the latest version of its operating systems. It appeared since September 30, 2014 and its first edition was released in July 29, 2015. Windows 10 appeared immediately after Windows 8.1 and Windows 9 was not released as expected. This is because the company wanted to refer to the great advancement, updates, and various advantages that Windows 10 has over Windows 8.1.

#### 8 -4 -1 New Features of Windows 10

### Skill 8 - 3 Knowing New Features of Windows 10



1. **One OS for all machines:** the most important advantage of Windows 10 is that it runs suitably on all personal computers, laptops, smartphones, and tablets.
2. **Reappearance of the Start Menu:** one of the most annoying features of Windows 8.1 is the disappearance of the Start Menu. In Windows 10, the Start Menu reappeared but it has been merged with the Metro interface to provide an attractive appearance.

3. **Multiples Desktops Property:** now in Windows 10, you can create more than one Desktop and move among these Desktops easily.
4. **Desktop Applications:** Apps are small programs from the world, smartphones, and tablets such as weather, calculator, ...etc. In Windows 10, you can run the apps separately as in Windows 8.1 or through the Desktop which is the new feature in Windows 10. In addition, the number of apps has increased to more than 2,000,000 apps existing on Microsoft Store of Windows 10.
5. **The WindowsAssistant “Cortana”:** In Windows 10, Microsoft provided a digital assistant and named it “Cortana”. Cortana is a program that allows the user to reach the information, and files through audio and written commands.
6. **The Loading Speed:** Loading Windows 10 and start running it takes only 20 seconds approximately.
7. **Microsoft Store:** Microsoft Store that comes in Windows 10 contains many applications such as social media applications, e.g. facebook, which allows you to login to these applications without the need to browsing them on the internet.
8. **Running Applications:** Windows 10 runs most of the applications that run on Windows Vista, Windows 7, Windows 8, and Windows 8.1.
9. **Protection and Security:** In Windows 10, you can sign into your computer through various methods such as password, facial recognition, fingerprint, eyeprint when the hardware required is available on your machine.

#### **8- 4- 2 Window 10 System Requirements**

### **Skill 8 - 4** **System requirements to upgrade to Windows 10**



You can upgrade to Windows 10 if the operating system on your machine is a legal copy of Windows 7 or Windows 8.1. Also, there are other software and hardware requirements to be able to run Windows 10:

1. At least 1 GHz processor.
2. At least 1 GB RAM to run Windows 10 32 bit and 2 GB RAM to run Windows 10 64 bit.
3. A free storage space not less than 16 GB for 32 bit and 20 GB for 64 bit.
4. DirectX 9 or the latest version of WDDM 1.0.

**8-4-3 Editions of Windows 10:****Skill 8-5**

Knowing the different editions of Windows 10 and the features of each



Microsoft has released different editions of Windows 10 (32 bits and 64 bits). Each edition contains certain features to cover the need of particular users and these editions are:

1. Home Edition: this edition targets the ordinary users. It contains the Start Menu and its applications. We need a desktop with complete specifications to run the classic Windows programs.
2. PRO Edition: this edition targets small corporations. It contains all the features of the Home Edition in addition to some extra features for networks and encrypting data.
3. Mobile Edition: this edition has been designed for smart phones and tablets and provide different advantages among which maintaining the battery for longer periods.
4. Enterprise-Enterprise/Mobile Edition: this edition was designed for large corporations that has many branches in different cities and that uses computers of different types and specifications from desktops, laptops, and smart phones.
5. Education Edition: Microsoft allocated this edition for educational institutions such as school, institutes and universities.
6. Internet of Things (IOT) Edition: this copy of Windows 10 is more specialized where it is used to run things through the internet such as controlling and running ATMs and controlling home appliances through the internet.

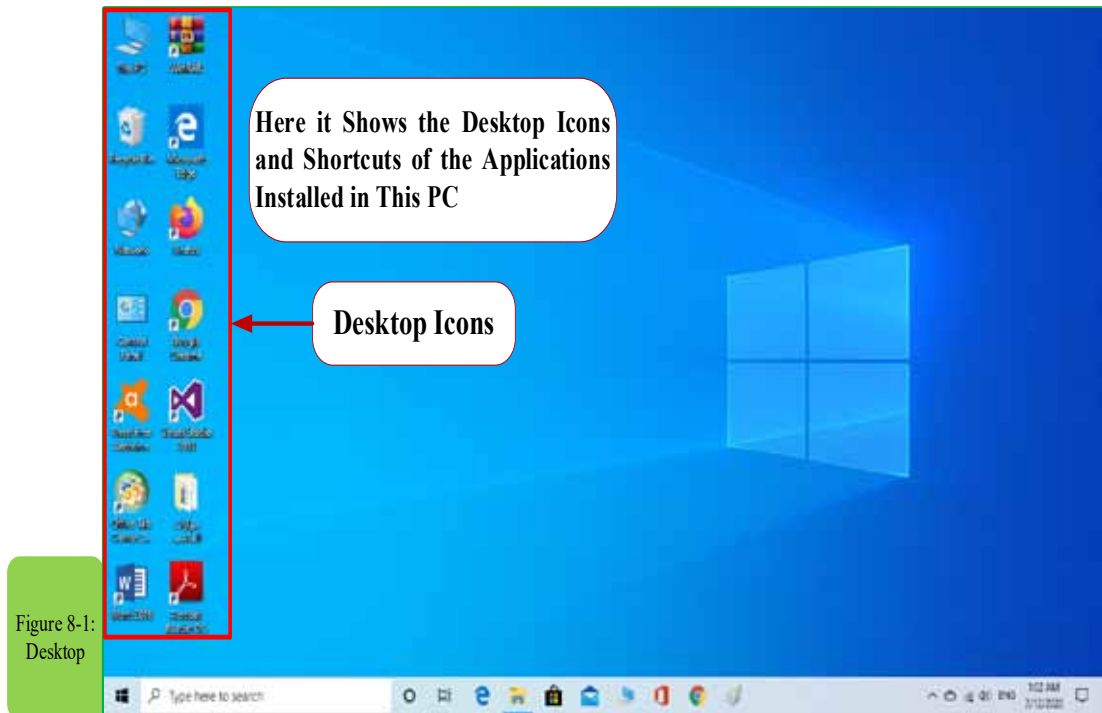
**8-5 Desktop:****Skill 8 - 6**

Recognizing Desktop



Desktop is the main screen that appears on starting Windows 10. It contains a set of icons that tell about the applications and programs installed on the computer.

You can add shortcuts for the programs and applications on the Desktop to ease reaching them see Fig. 8- 1.



### 8- 5- 1 Start Menu:

**Skill 8 - 7**  
running programs and applications from the Start Menu



The Start Menu is the main menu that appears in the left bottom of the Desktop. It allows you to control the applications, programs, files, settings, icons, search, etc. Windows 10 has returned the Start Menu with a modern view as in Fig. 8 -2.

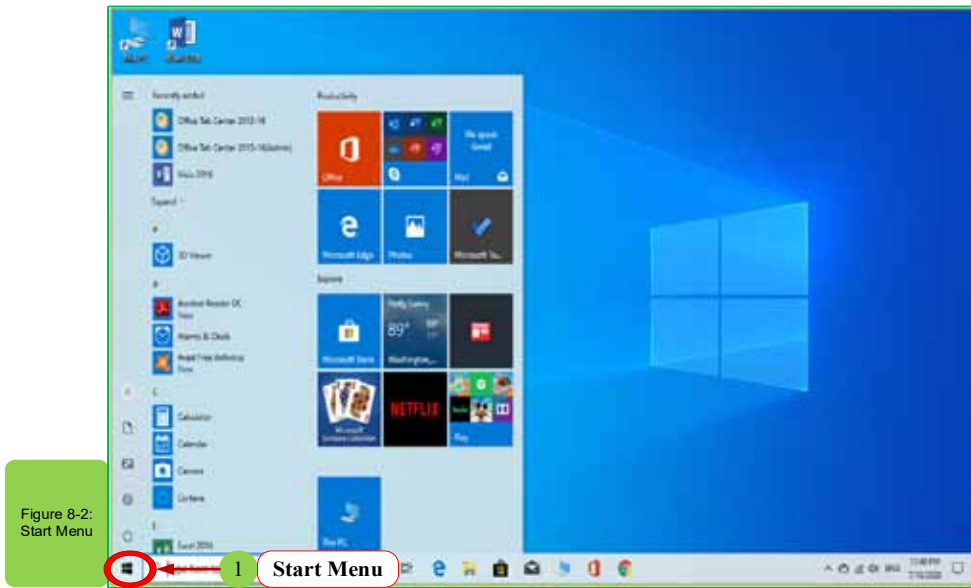


Figure 8-2:  
Start Menu

**Changing the Start Menu:**

**Skill 8 - 8**  
Changing the Start Menu

*To change the Start Menu, follow the following steps:*

1. Right click on an empty place on the Desktop. The Desktop options menu will pop up. Select “Personalization” as in Fig. 8 -3.

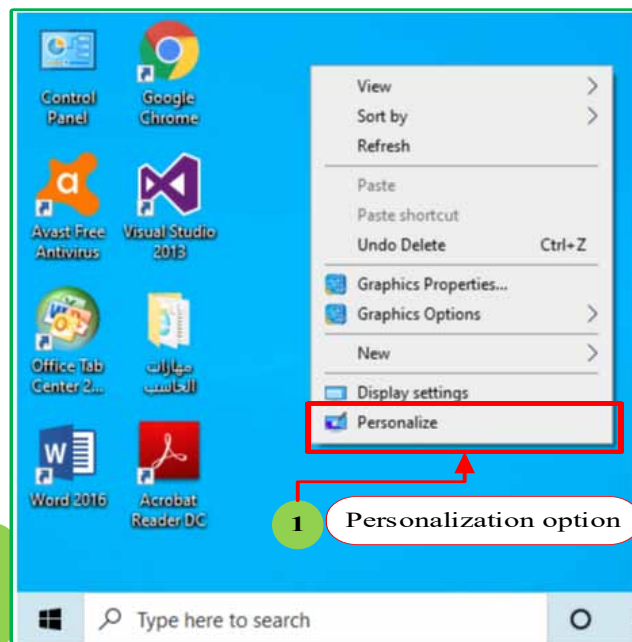
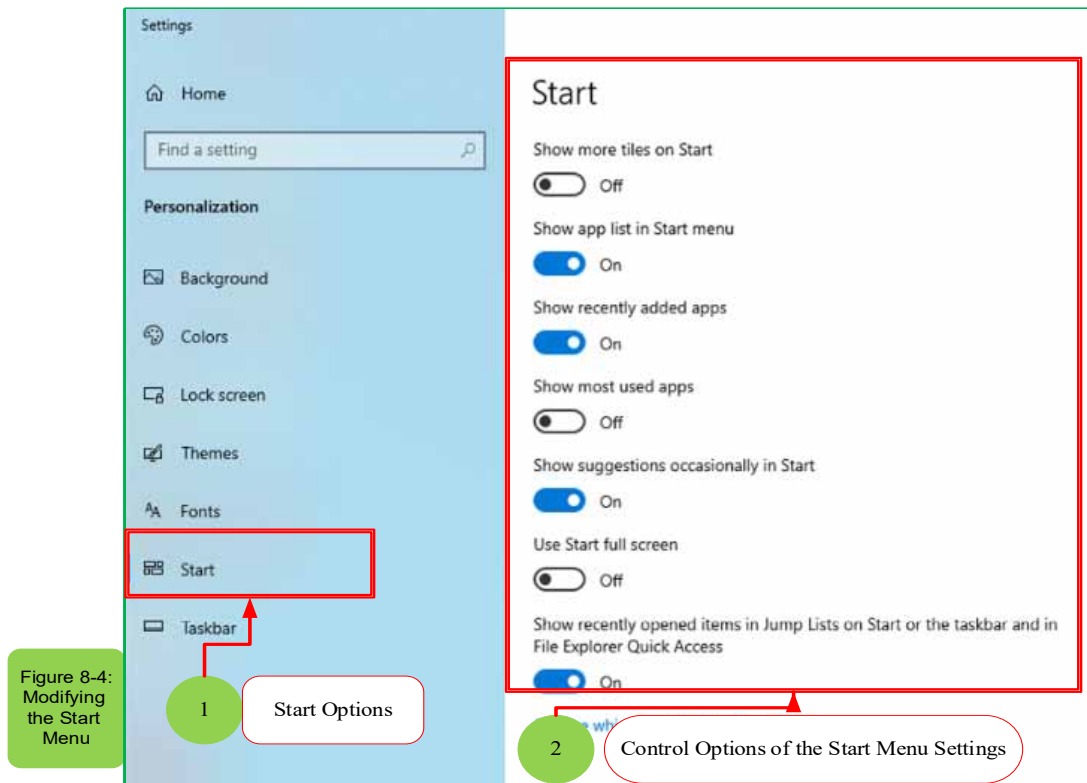


Figure 8-3:  
Personalization  
Option

2. The “Settings” window will appear. Click on “Start”. Then, make the required changes to the Start Menu as in Fig. 84-.



### 82-5- Dealing with the Desktop Icons:

- **Knowing the most important Desktop icons**

**Skill 8 - 9**  
Knowing the most important Desktop icons



Icons represent a shortcut to quickly start the applications and programs installed on the computer from the Desktop. There are two types of icons:

- **Windows 10 Icons:** they are the icons of the programs and applications that come with Windows 10. Examples of these icons are “This PC”, “Control Panel”, “Recycle Bin”, the personal folder (my folders).
- **Icons of Other Applications and Programs:** they are the icons of the applications that the users need and install on the computer and appear directly on the Desktop. Examples of Desktop icons are the Recycle Bin and the Control Panel as in Fig. 8 -5.



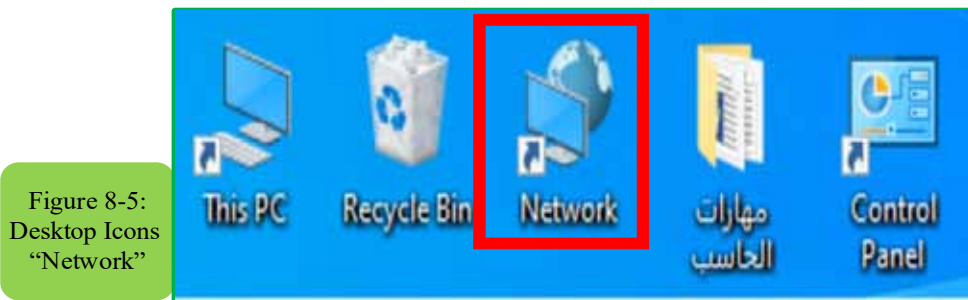


Figure 8-5:  
Desktop Icons  
"Network"

● **Control Panel:**

Definition of the control panel: it is a folder through which the user can control all computer hardware and software and change the device settings through which it can do many tasks such as removing programs and changing the device language and these tasks will be detailed in a later part.

● **Icon of Computer:**

The icon of "This PC" is an icon that enables the user to view all the storage units on the computer such as hard disks and floppy and compact disks. Fig. 8 -6 shows the window of "This PC".

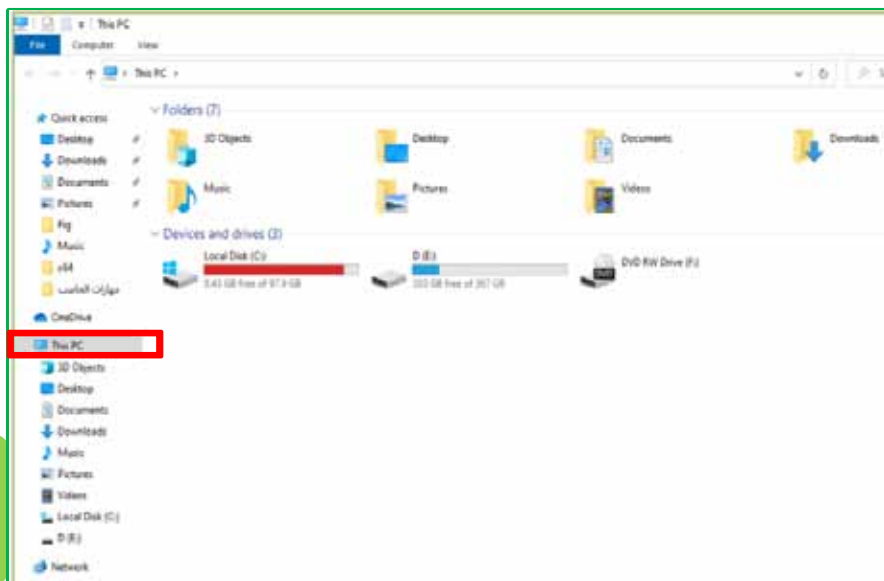


Figure 8-6:  
Window of  
"This PC"

● **Recycle Bin:**

**Skill 8 - 10**

Restoring deleted files and folders from the Recycle Bin

The Recycle Bin is the place where the deleted files and folders are sent. From the Recycle Bin, it is possible to restore the deleted files and folders if needed. Fig. 87- shows the contents of the Recycle Bin.

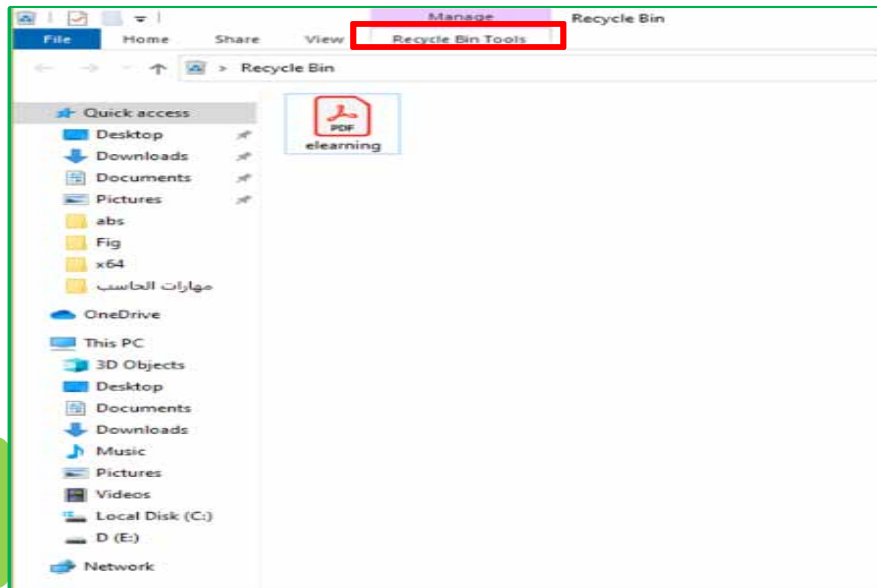


Figure 8-7:  
Contents of the Recycle Bin

To restore a file or a folder from the Recycle Bin, right click on the file or the folder as shown in Fig. (8- 8), then select “Restore”.

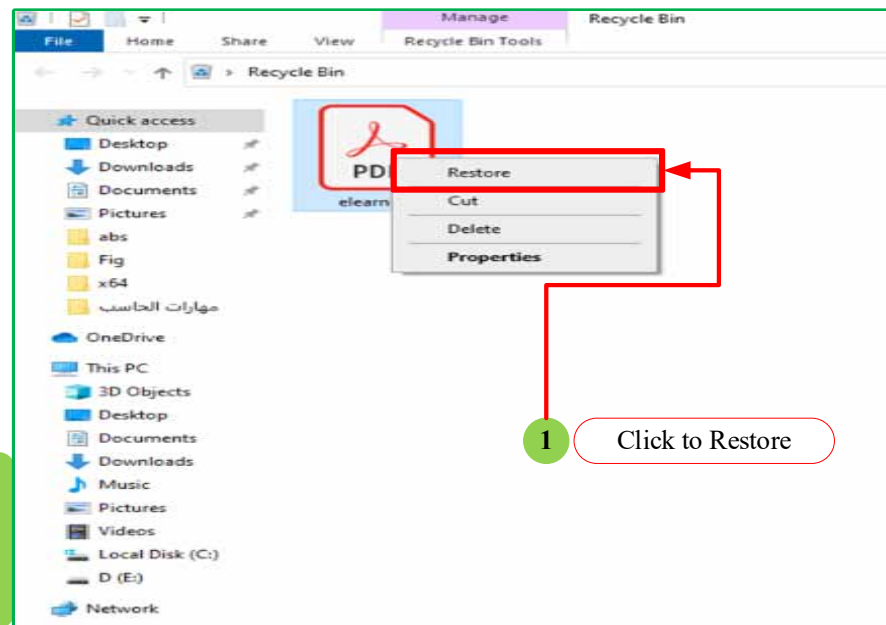


Figure 8-8:  
Restoring File or Folder from the Recycle Bin

To permanently remove a file from the computer, go to the Recycle Bin, right click on the file and then select “Delete”. You can delete a file or a folder from anywhere in the PC permanently without sending it to the Recycle Bin by selecting

the file or the folder and pressing “**SHIFT + DELETE**”. **Showing/Hiding the Desktop Icons:**

### Skill 8 - 11 Showing or Hiding Desktop Icons



*The Desktop icons might be hidden. To display them, follow the following steps:*

1- Right Click on an empty place on the Desktop. A window will appear as shown in Fig. 89-. Select “**Personalize**”.

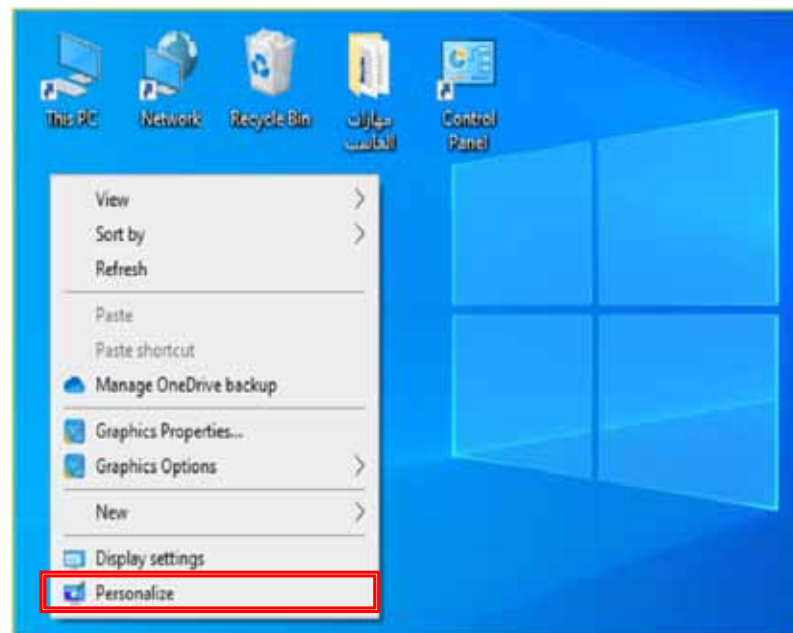
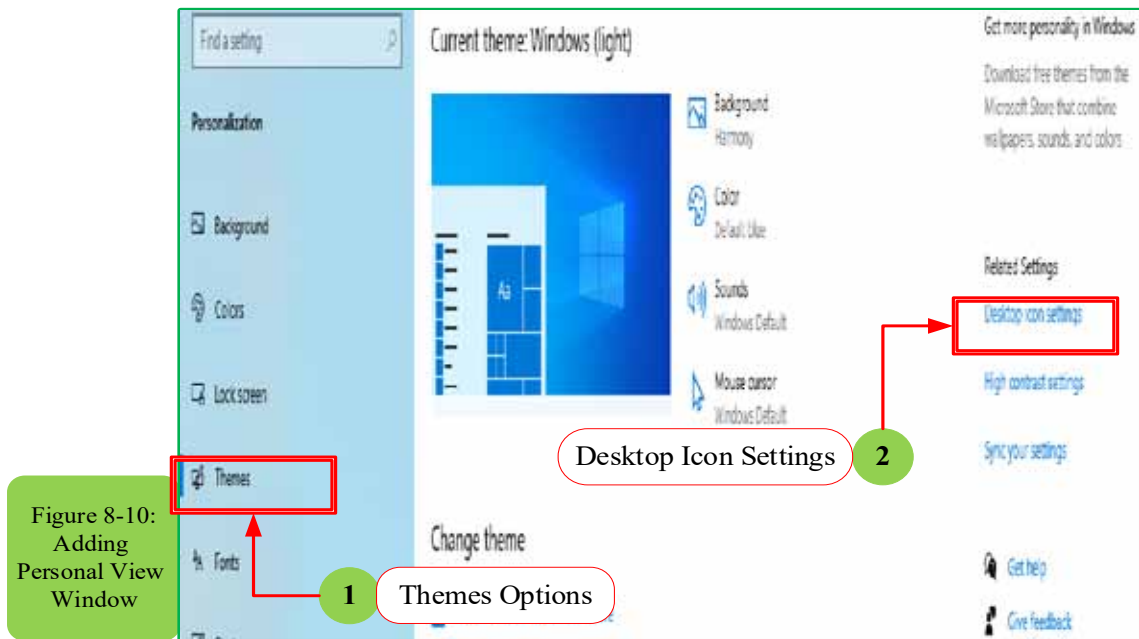
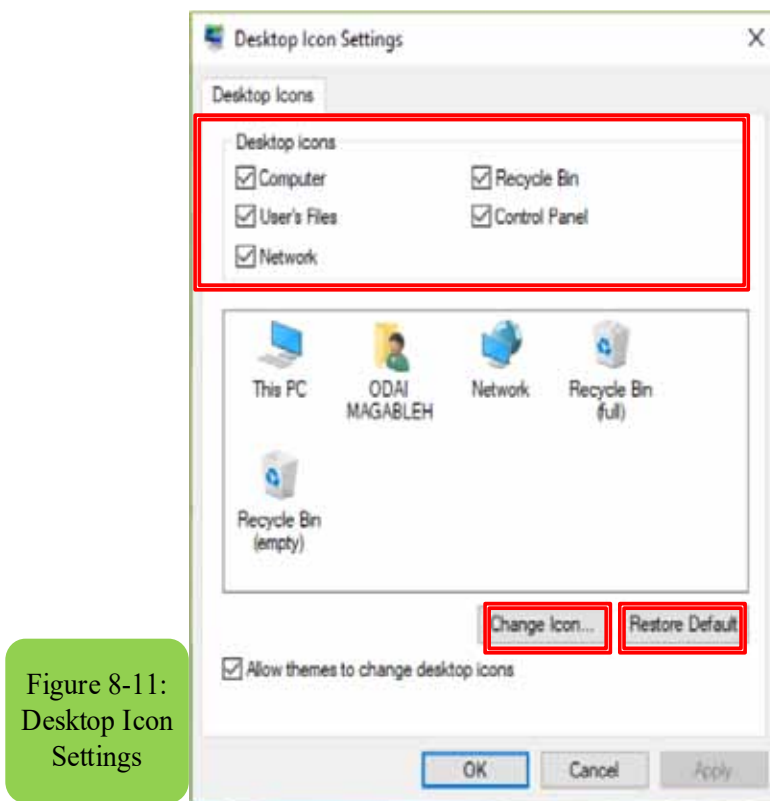


Figure 8-9:  
Personalization  
Window

2. **Settings>Personalization** window will appear. Select “**Themes**”. Select “**Desktop icon settings**” as shown in Fig. (8- 10).



3. Select the icons you want to display on the Desktop as shown in Fig. 811-.



4. Click "OK". Also, you can change the icons from the previous window.


**8-5-3 Changing the Desktop:**

*For Desktop Personalization, follow the following steps:*

1. Right click on an empty location on the Desktop. The options window will appear. Select **“Personalize”**.
2. The **“Settings> Personalization”** Window will appear. From this window, you can personalize the Desktop. For Example, you can change the Background, the Colors, the Start, the Taskbar, the Lock Screen, the Themes, etc. Changing the Desktop Background:

### Skill 8 - 12

## Changing the Desktop Background



**To Change the Desktop Background, follow the following steps:**

1. Right Click on an empty location on the Desktop, the options of Desktop will appear. Select **“Personalize”**.
2. the **“Settings”** window will appear. Click on **“Background”**.
3. Select the suitable Background. A window will preview the Background as shown in Fig. 8- 12.

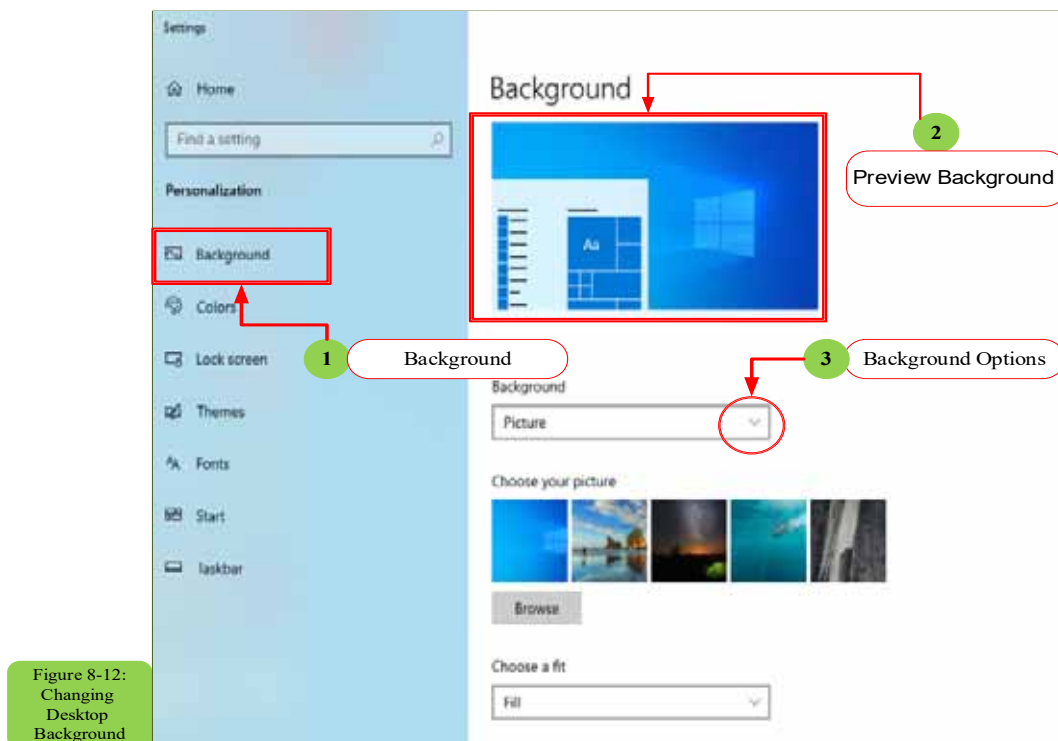
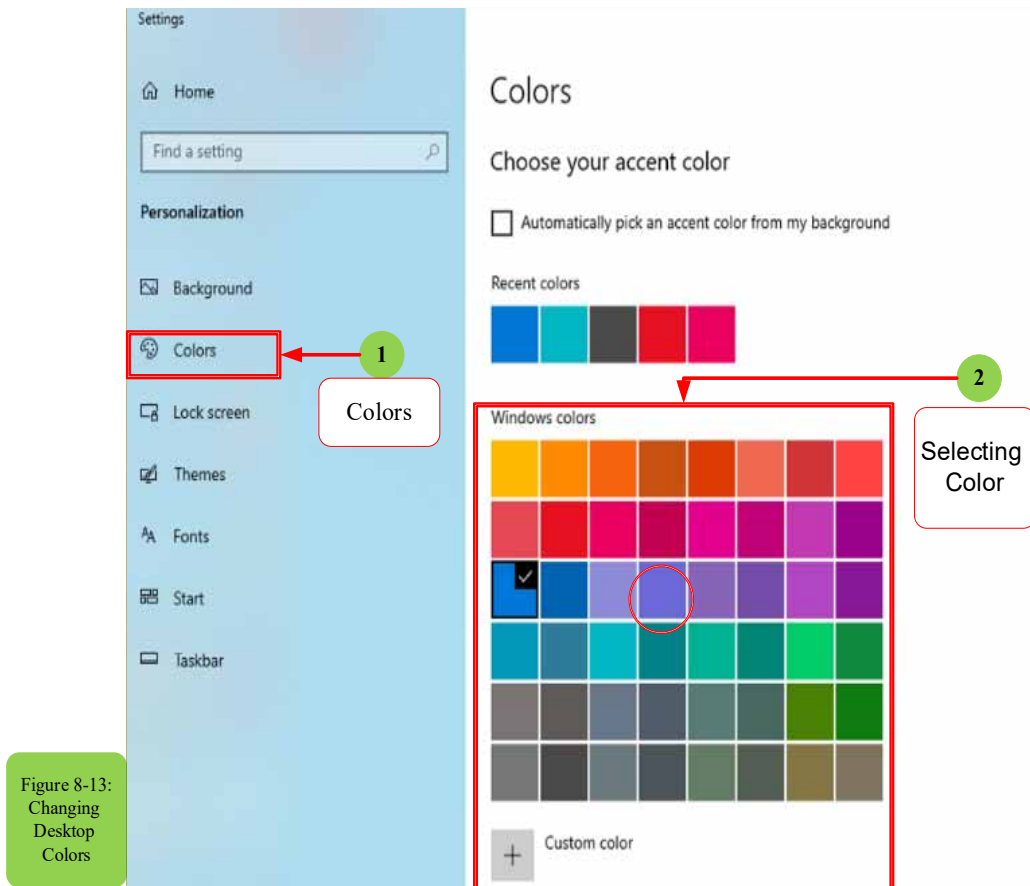


Figure 8-12:  
Changing  
Desktop  
Background

- **Changing the Colors:**

*To change the colors of the menus, follow the following steps:*

1. Right Click on an empty location on the Desktop. Options menu will appear. Select “**Personalize**”.
2. The “**Settings > Personalization**” window will appear. Click on “**Colors**” tab, then select the desired color as shown in Fig. 8- 13.



- **Changing the Lock Screen:**



*To change the Lock Screen, follow the following steps:*

1. Right click on an empty location on the Desktop. The options menu will appear. Select “**Personalize**”.
2. The “**Settings**” window will appear. Click on the “**Lock Screen**” tab. Then selected the desired Lock Screen.

3. Select the suitable Background for the Lock Screen. The preview will appear on the upper window as shown in Fig. 814-.
4. Click “ON” to apply the desired Lock Screen.

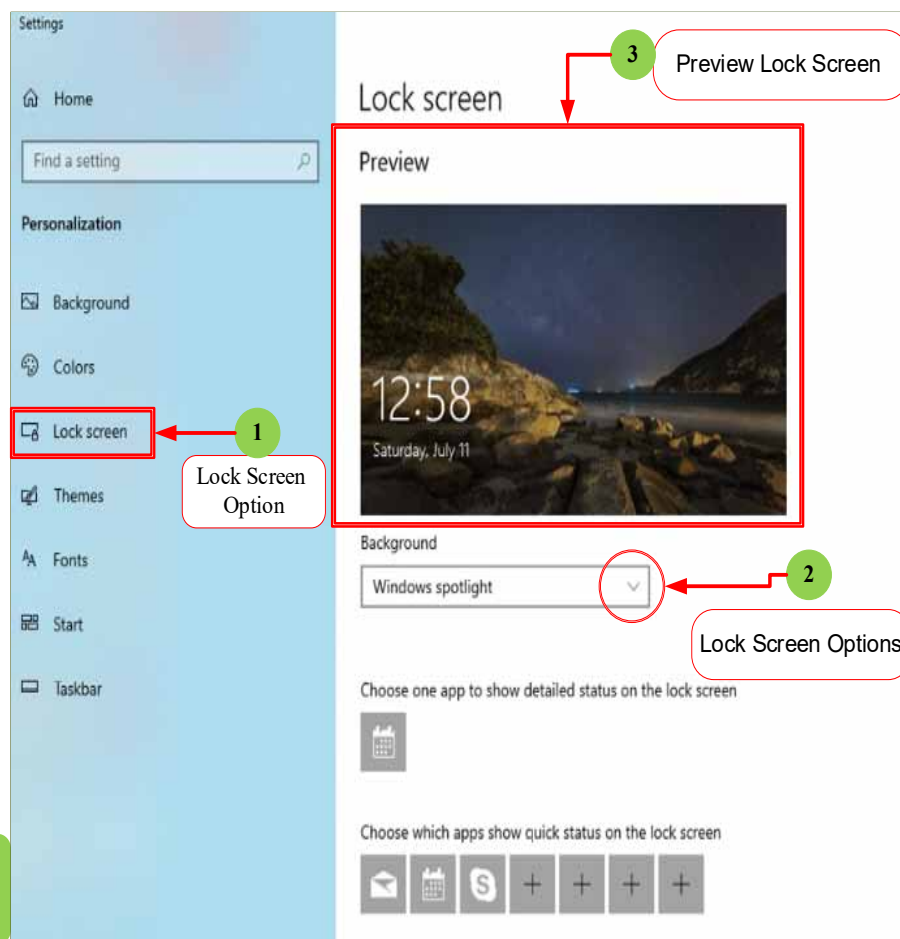


Figure 8-14:  
Changing the  
Lock Screen

1

● **Display Settings:**

**Skill 8 - 14**  
Adjusting Display Settings



The option of the display settings enables you to adjust the screen resolution and make it easier to read what appears on the screen. To adjust the display settings, follow these steps:

1. Click on an empty place on the desktop with the right mouse button to display the Desktop Options window and choose “Display Settings” as shown in Figure (8- 15).

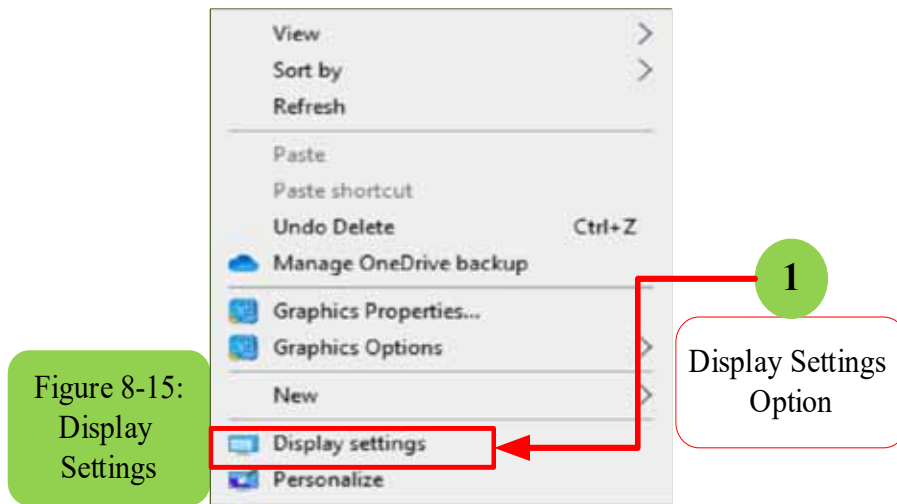


Figure 8-15:  
Display  
Settings

2. A “Settings” window will appear from it. Click on the “Display” option, and through it you can control (color, scale, resolution, orientation, layout,...). See Figure (8- 16).

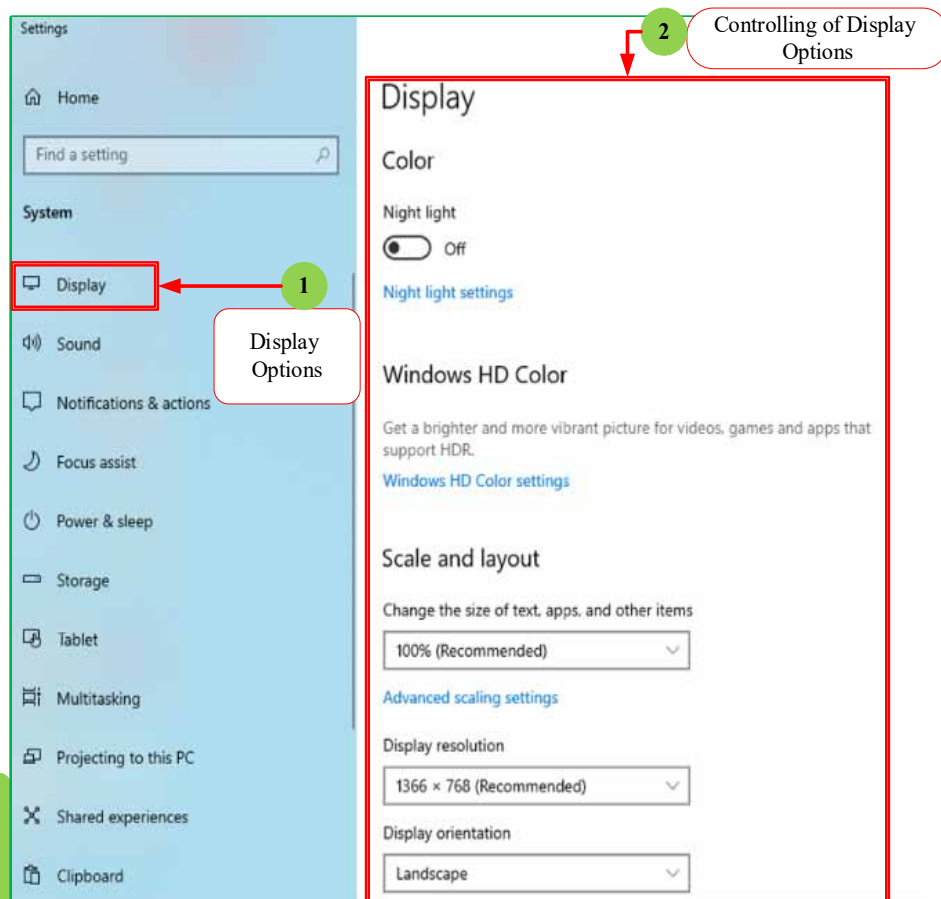
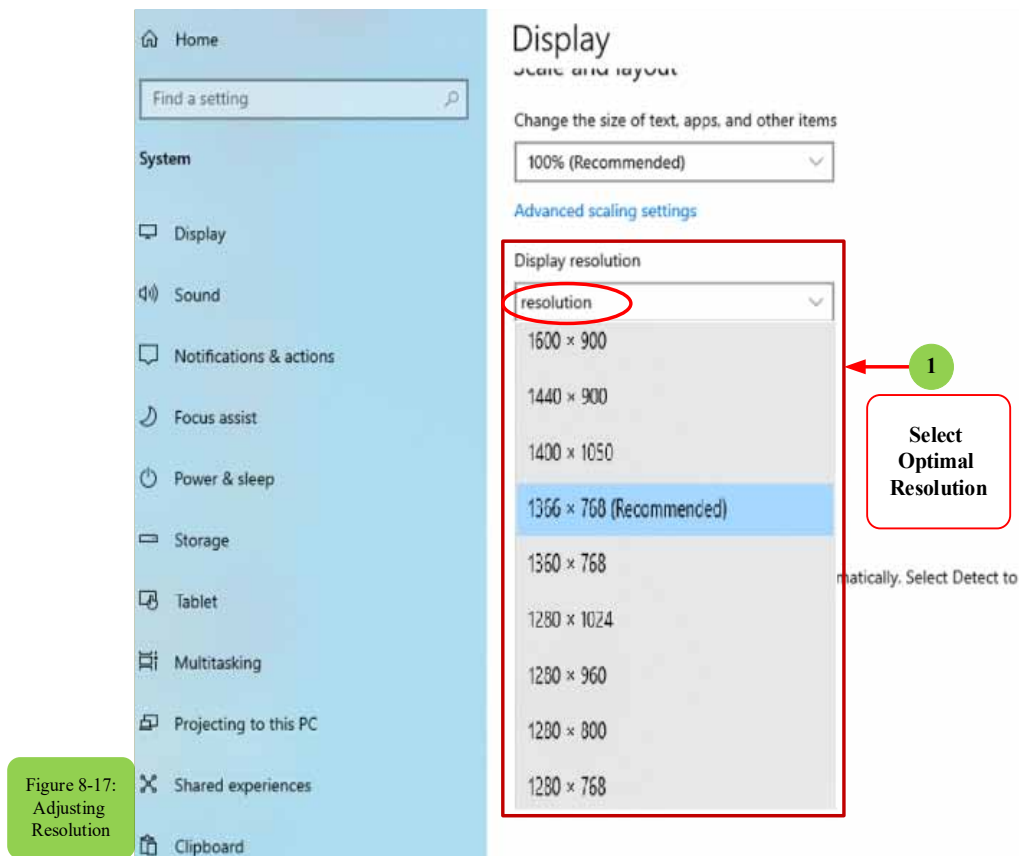


Figure 8-16:  
Adjusting  
Display  
Settings



- For example, to change the resolution settings by increasing or decreasing the number of colorpixels per square inch, left-click on the resolution box.
- Adjust to the resolution you want to change the appearance of the screen, see Figure (8- 17).



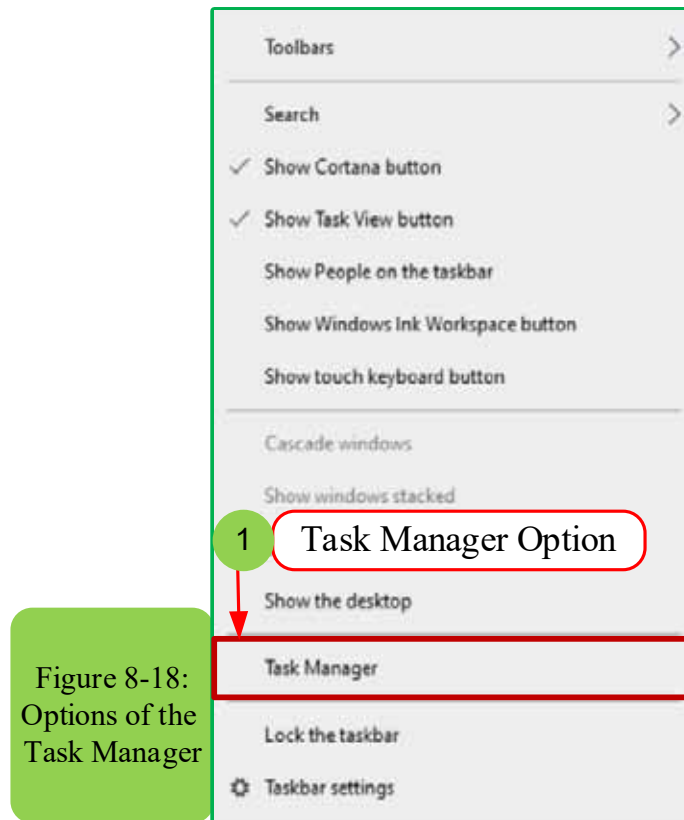
**8 -6 Taskbar:**

**Skill 8 - 15**  
Recognizing the settings of the Taskbar

The taskbar is the bar that runs along the bottom of the desktop screen, in which active windows appear on the desktop, and it contains several items the most important of them (language selection buttons, clock and date buttons, volume control, and the Start button).

**To show taskbar settings, follow the following steps:**


- Right-click on the taskbar. A window will appear with several settings for the taskbar, then click on the task manager option as shown in Figure (8 -18).



2. The “Task Manager” setting enables you to end any active task on the computer by selecting the task and then clicking End task.

- **Moving the Taskbar**

**Skill 8 - 16**  
**Moving The Taskbar**



***To move the taskbar, follow the next steps:***

1. Right-click on the taskbar and ensure that “lock taskbar” option is not enabled in the taskbar settings
2. Hold down the primary mouse button, and then drag the mouse pointer to the place on the screen where you want the taskbar.
3. The taskbar will take its place in that area of the desktop screen, see Figure 8- 19.

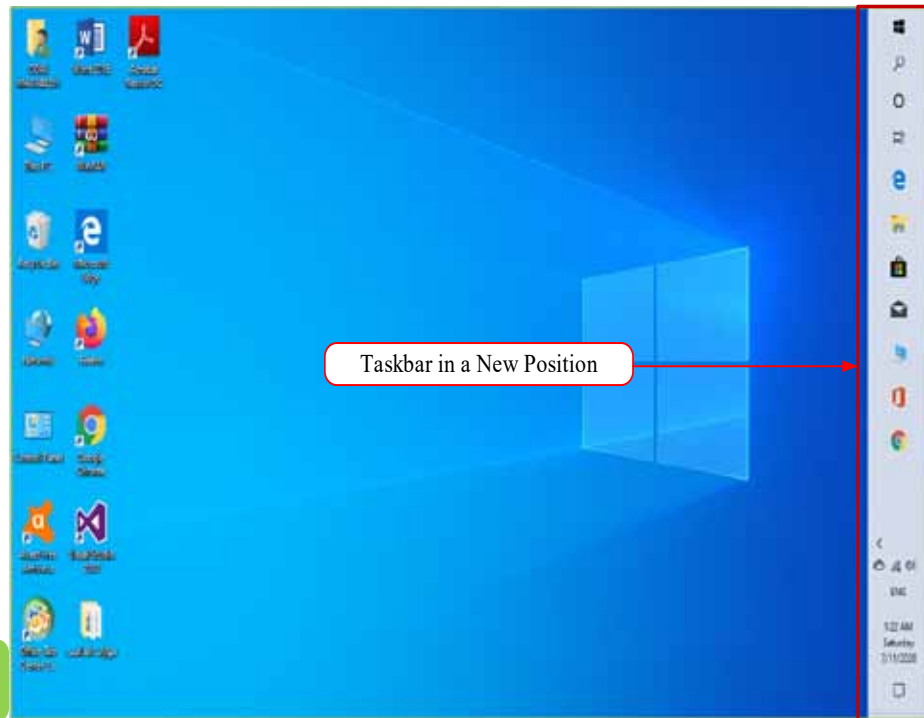


Figure 8-19:  
Moving Taskbar

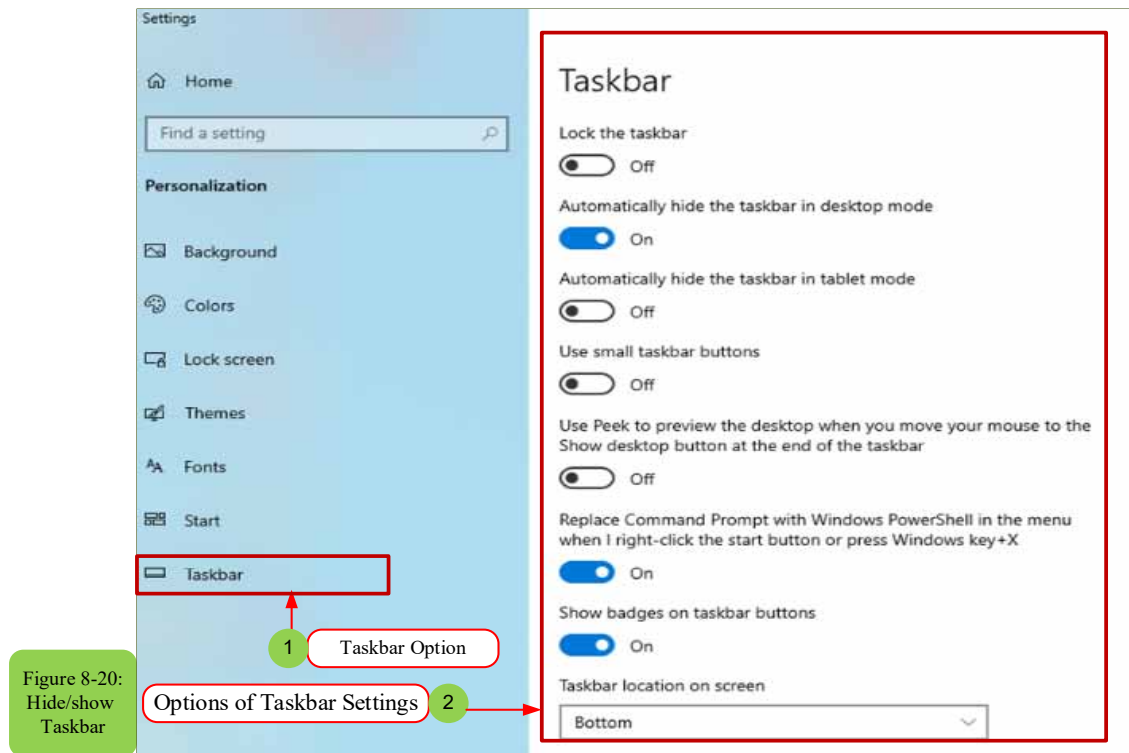
- **Changing the Taskbar Settings**

**Skill 8 - 17**  
Changing the Taskbar Settings



**To change the taskbar, follow these steps:**


1. Right-click in an empty place on the desktop and choose "Personalize."
2. A "Settings" window will appear from it, click on the "Taskbar" settings.
3. Make the appropriate change you want to the taskbar settings, see Figure 8- 20.



After learning about the taskbar settings, some of these settings can now be changed, for example temporarily hiding the taskbar from the desktop screen as in the following steps

- **Hiding the Taskbar from the Desktop:**

**Skill 8 - 18**  
**Hiding The Taskbar**



*To hide the taskbar, follow these steps:*

1. Right-click in an empty place on the desktop and select “Personalize”.
2. A “Settings” window will appear from it, click on the “Taskbar” settings.
3. Turn on the option “Automatically hide the taskbar in desktop mode” see Figure (8- 21).
4. The taskbar will disappear from the screen and you can restore it by moving the mouse over the bottom of the screen.

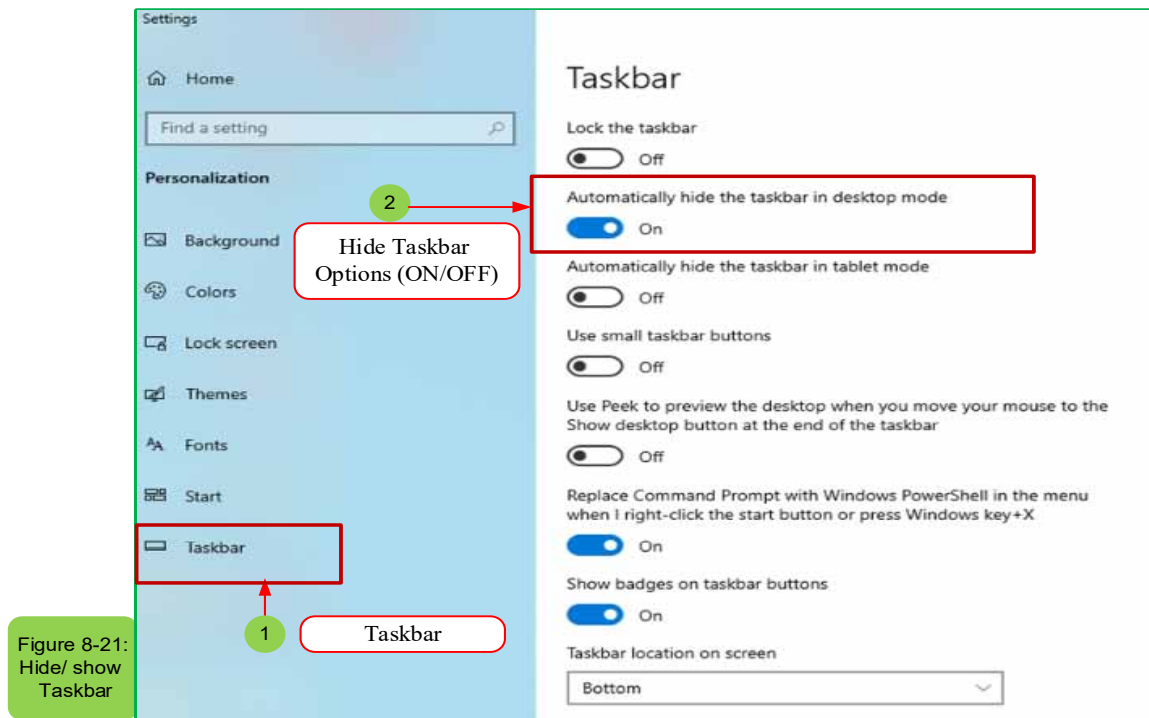


Figure 8-21:  
Hide/ show  
Taskbar

## 8- 7 Working with folders and files

*In this section we will explain:*

How to use the file explorer program known as Windows Explorer?


- How to save files outside the computer, for example on the Internet via OneDrive.
- How to recover and save files and learn how to create, save, change and rename the folder.

Currently we do not have to deal with the system on the default settings for Windows, so one of the changes that the system user may want is to manage folders, for example when clicking on the (File Explorer) icon in the taskbar, the Quick Access folder opens but some users prefer to enter (This PC) window instead of the Quick Access.

- How to add folders or files to the Quick Access folder in order to facilitate access to them, especially if these files are the most used and their access require opening a lot of other folders.

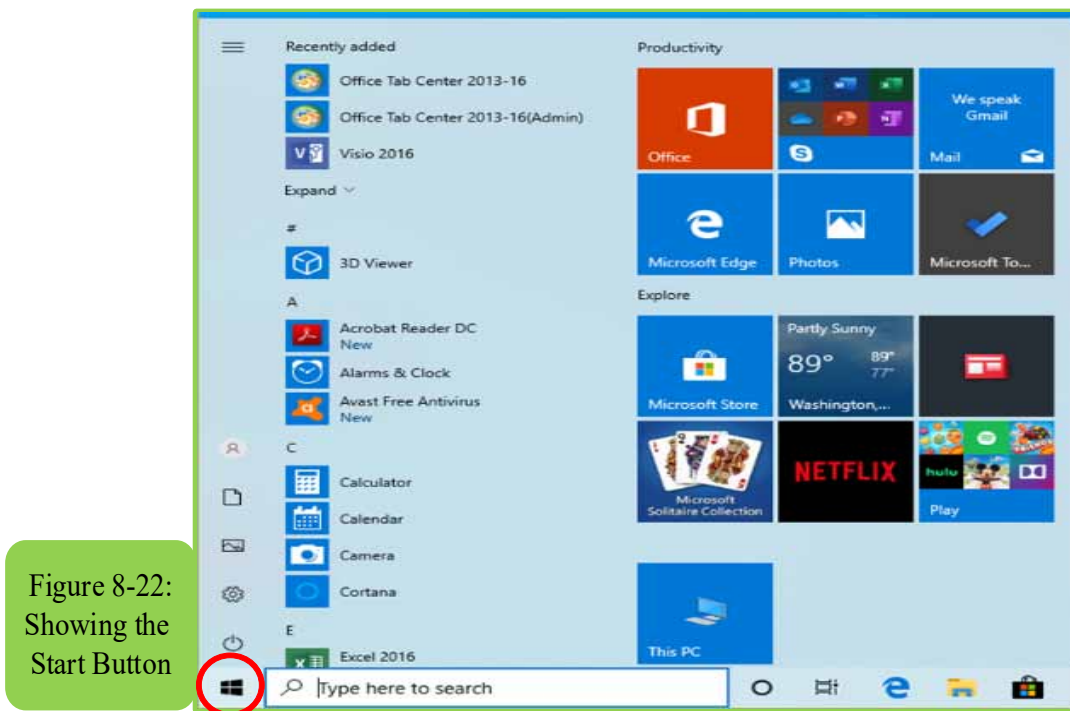
**8- 7 -1 How to Browse Files:**


**Skill 8 - 19**  
Using start and File Explorer Buttons



The file is a collection of data that is stored inside the storage media (hard disk, CD, or flash memory) and has different extensions (such as Excel, Microsoft word, etc.) and the user can deal with it either by restoring, modifying, deleting, sharing, or Print them out.

Through File Explorer, you can manage the storage areas on the computer, allowing you to copy, move, rename or delete files. To open File Explorer, click the Start button as shown in Figure 822-




Then we choose from the Start menu file explorer button, or by pressing the Windows  +E buttons as in Figure 823-



8- 7- 2 Dealing with quick access window and internal media

**Skill 8- 20**  
Learning the dealing with Quick Access window and Internal Media



When you press the button in Figure 823-, the Quick Access window appears to us through which all the file explorer windows can be displayed and browses all the files and folders that have been worked with recently or frequently as in Figure 8- 24.

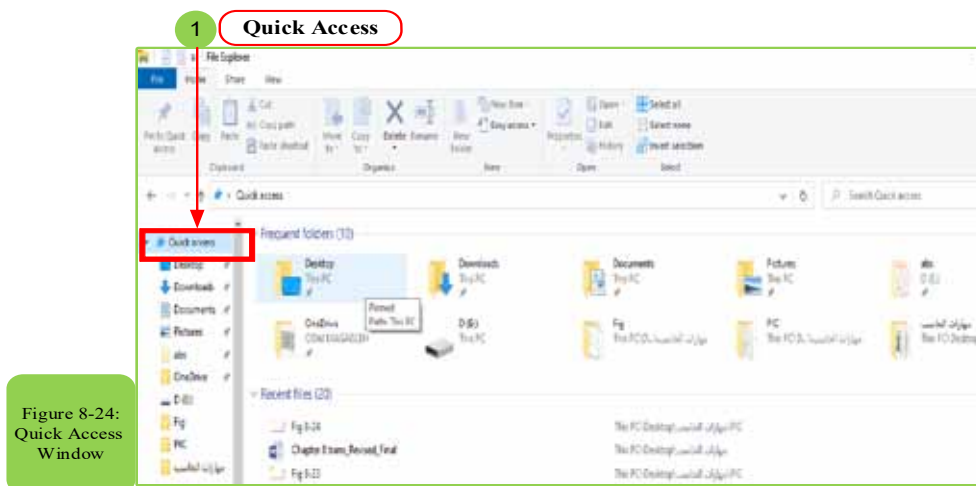


Figure 8-24: Quick Access Window

When you click on “This PC” icon located inside File Explorer, it shows all the secondary storage media through which you can find the file that we want to work on as in Figure 825-.

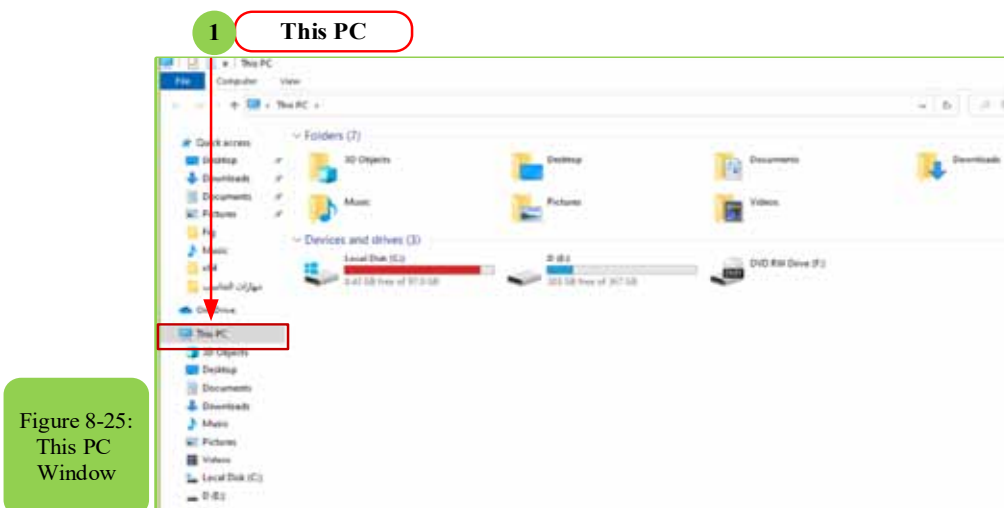



Figure 8-25: This PC Window

We also find that the information displayed in the window of this PC helps you to access the files or folders you want.

**8-7 -3 File Types:**

**Skill 8- 21**  
Learning about the most important Types of files



There are many types of files that can be created within the Windows 10 operating system. Each type has its own formatting that defines from the file extension and on creating any file the type is chosen at the beginning, thus the operating system places the extension automatically, and the file extension determines its type, and it usually consists of three or four Characters in English, separating the filename with a dot (.)

Example: on creating a microsoftword file, the two sections appear to us as in Figure 8- 26. The operating system asks to type the name of the file the user desires. When writing the file name, the following should be considered:

- Filename must not exceed 219 characters.
- Filenamedoes not contain special signs like +, /, \*, ... etc.
- Filename name can contain numbers

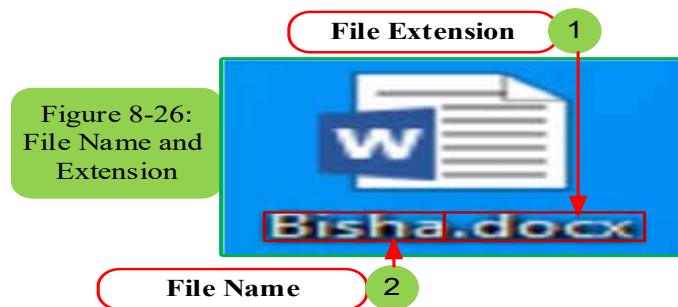



Table 8- 1 shows examples of the most common file extensions.

Table 8- 1 Examples of the most common extensions		
1	Word Files	DOCX , DOC, TXT
2	Power Point Files	PPTX, PPT
3	Excel files	XLSX, XLS
4	Access Database Files	ACCDB, MDB
5	Audio Files	WAV , MP3
6	Video Files	AVI , MOV , DAT
7	Photos	BMP , JPG, GIF, PNG, TIFF
8	Executables files	EXE, COM
9	Adobe Acrobat file	PDF



8 -7- 4 Creating Files

**Skill 8- 22**  
Recognizing the Creating and Renaming of Files



*There are several methods to create files, for example:*

1. The traditional method: files can be created directly from their own programs by entering the Start menu and choosing the specific program.
2. The Fast Way: There is a fast way to create a file in some programs, including setting a shortcut to create its files in a fast way on the desktop, as follows:
  - We click the right mouse button on the desktop or in any folder in an empty place, as in Figure 827-
  - We choose from the sub-menu that appears (New).
  - Another submenu appears from which we select the desired file that we want to use, for example (MS Word).

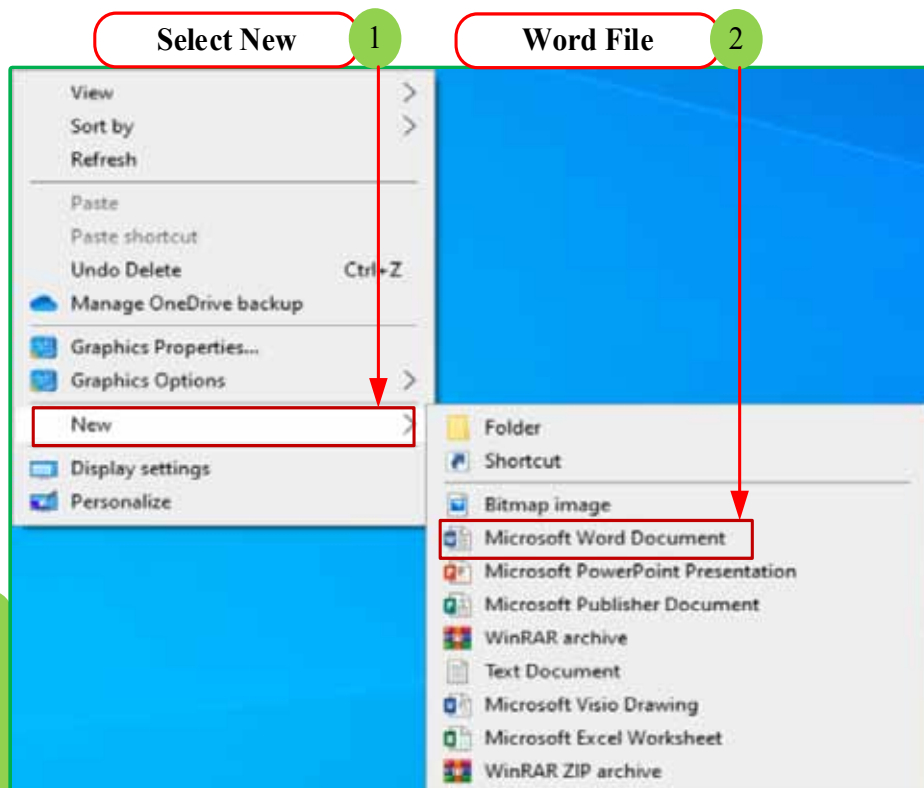



Figure 8-27:  
Creating a  
New File by  
Using the  
Mouse Right  
Click

- The required file will be created and given a default name that can then be modified.

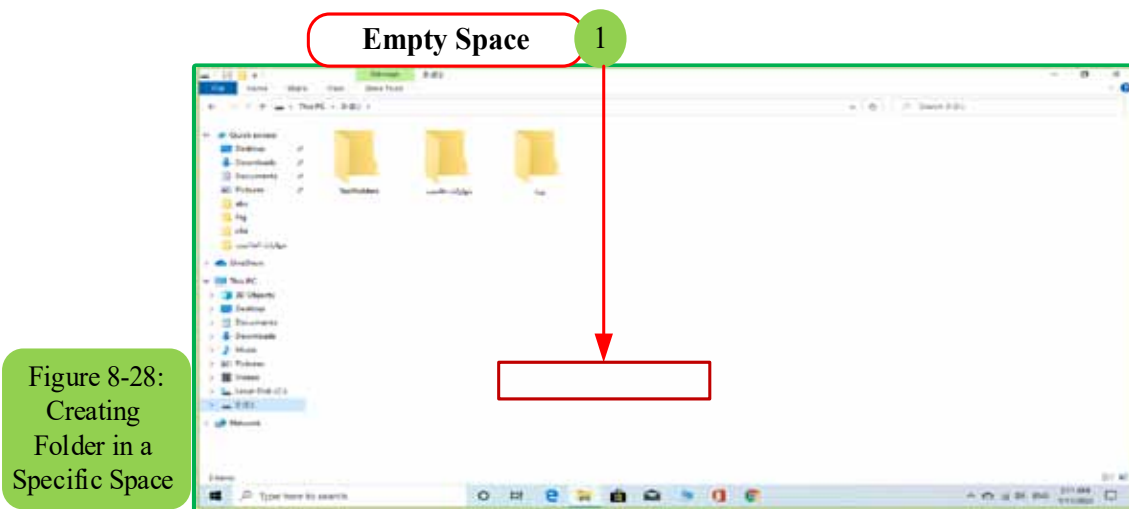
**8-7-5 How to create a Folder**

**Skill 8 - 23**  
How to create a folder on the Desktop

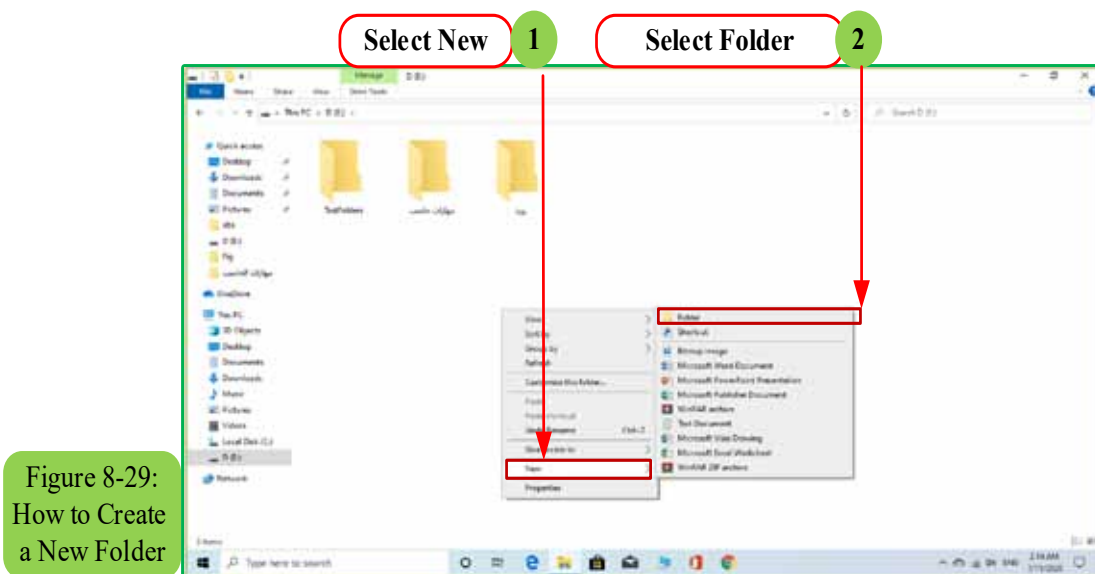


To store new data inside a folder, you can create a new folder by following these steps:

1. Open the place where you want to create the folder using the Windows file browser, as in Figure 828-.



2. Right-click on an empty space as shown in Figure 829-.
3. Choose “New” from the pop-up menu. A sub-menu will appear for you. Choose “Folder” from the top of the list, as shown in Figure 829-.



- The folder will be created, and the operating system will assign its name by default, as in Figure 830-.

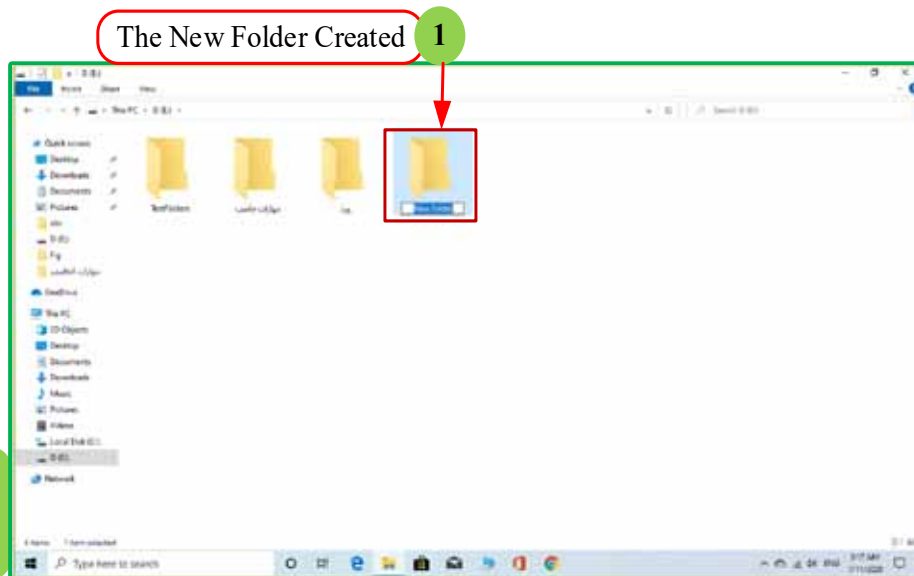


Figure 8-30:  
Showing the  
Created Folder

### 8 -7- 6 Editing a File or a Folder Name

**Skill 8 - 24**  
Editing a file or Folder Name

***There are several methods to edit a file or folder name:***

**The first method:**we select the folder or file whose name is required to be modified, then we single-click on the name of the folder or file and we write the new name and then press Enter or click the left mouse button outside the name text box.

**The second method:** we select the folder or file whose name is to be modified, then from the keyboard we press the F2 button and write the new file name and then press Enter

**The third method:** right-click on the folder or file whose name is requested to be modified as in Figure 831-. From the sub-menu that appears we choose (Rename), type the new file name and press Enter.

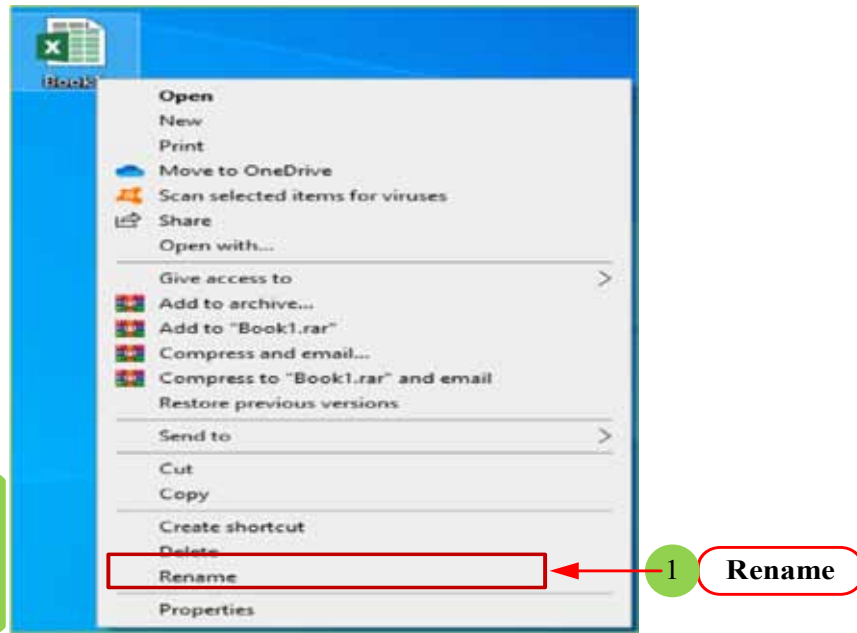


Figure 8-31:  
Editing/Renaming  
a File or a Folder

### 8-7 -7 Deleting a File or a Folder

**Skill 8 - 25**  
Deleting a file or a folder



*A file or folder can be deleted in several methods:*

**The first method:** we right-click on the file or folder required to be deleted. Then we choose from the sub-menu that shows a delete command as in Figure 8 -32.

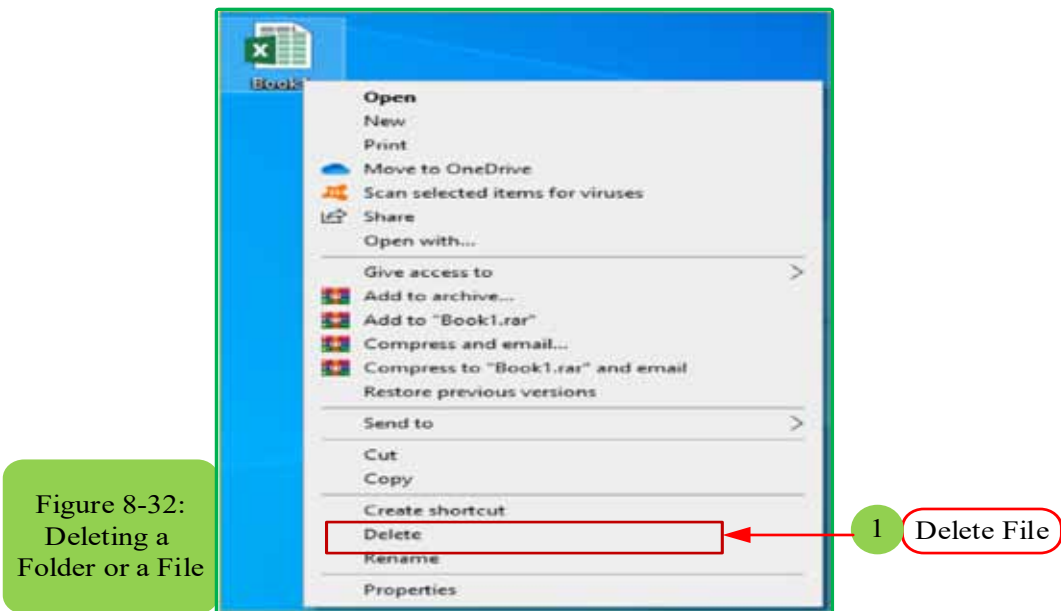


Figure 8-32:  
Deleting a  
Folder or a File

A confirmation message to delete the file or folder appears as in Figure 833-If we want to delete the file, we press the Yes button, and if you withdraw the idea of deleting, press the No button.

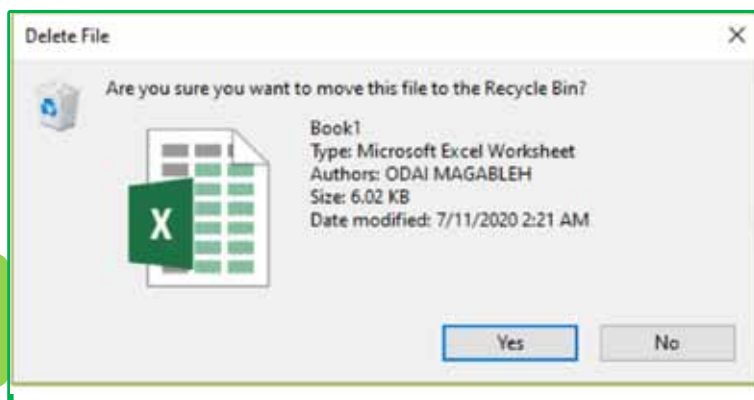


Figure 8-33:  
A Confirmation  
Message to  
Delete File

**The second method:** we select the file or folder to be deleted, then press the Delete button on the keyboard

**The third method:** We drag the file or folder to be deleted to the Recycle Bin. In this way, a warning message does not appear. The deletion is done directly

### 8 -7 -8 Saving Files in the OneDrive by default in Windows 10

**Skill 8 - 26**  
Saving Files in the OneDrive

Many of us want to keep their files in a place that guarantees their safety, so we find that in Windows 10 it included setting a default location called “OneDrive” to store the files as in Figure 834-. We find that the default setting is to save files to OneDrive, instead of saving them to the computer. This means that you will be able to access these files from any other device by connecting to the Internet. These files will also be protected in the event of damage to your computer. You can also change the “default save” setting at any time later.

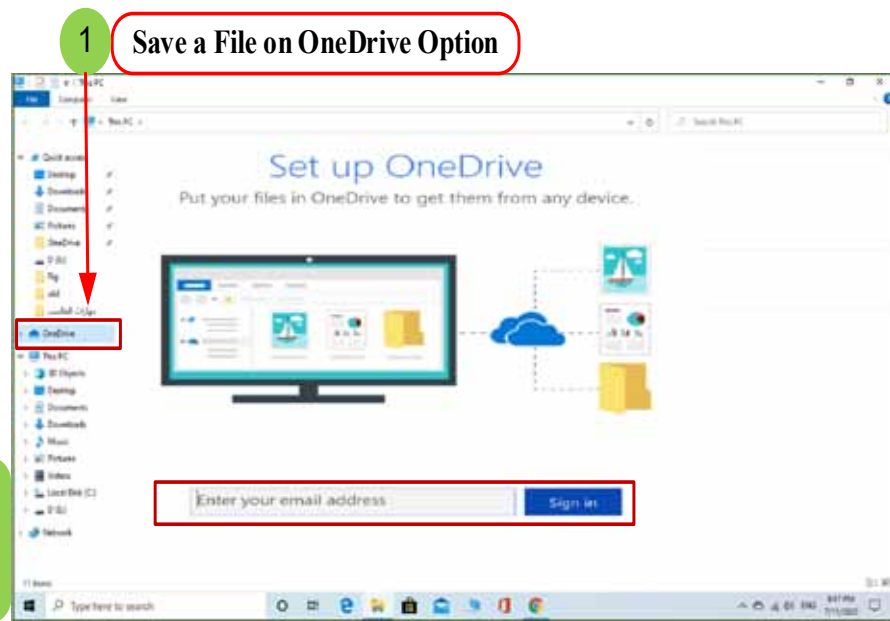


Figure 8-34:  
Saving Files to  
OneDrive

### 8-7-9 Selecting the location to save your files

By default, we can change the location where files are saved as following:

1. At the bottom of the Windows10 screen, as in Figure 835-, we right-click the OneDrive icon and click Settings.

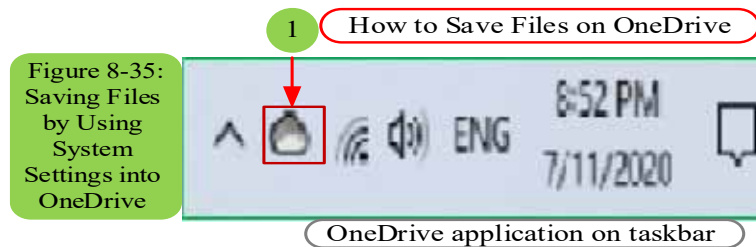


Figure 8-35:  
Saving Files  
by Using  
System  
Settings into  
OneDrive

2. In the Settings box, on the AutoSave tab, under Documents and Pictures, click the list in Documents or Pictures and choose the default save location you want.

## 8-8 Search for files and folders in Windows 10

### 8-8-1 Searching through the search box in Windows

The Windows search box function, located next to the Start button, is to help you find files on your device, hidden settings, or even hidden items or websites.

*To find the missing items, follow these steps:*

**Skill 8 - 27**  
Using the Search Box next to the Start Button

**1. Type what you want to search for into the search box next to the “Start” button**

When you start typing, Windows immediately starts looking for items match what you’re writing. For example, here is what happens when you search for files of the Computer Skills Course on your computer: When you start writing the words, Windows begins to display files or links matching the words that are written, as shown in Figure 8- 36 after writing only the word “skills”, you will see several files on your computer about the Computer Skills course (of course these files have been stored on your computer before).

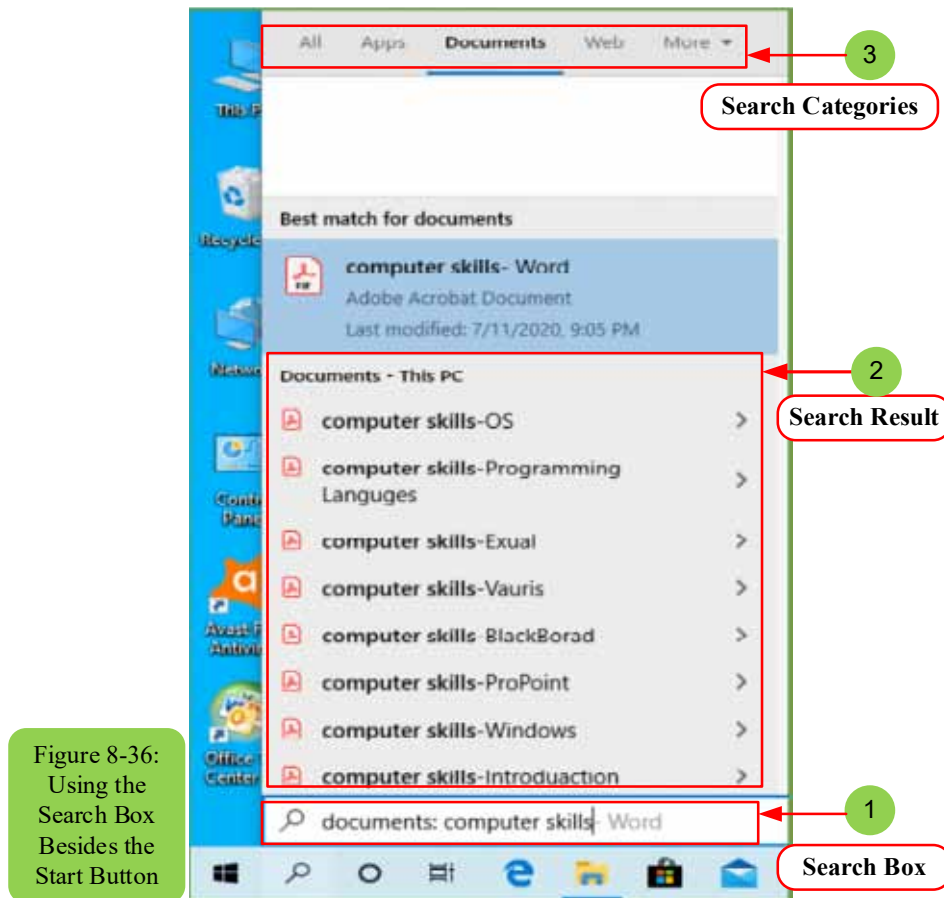


Figure 8-36: Using the Search Box Besides the Start Button

At this point, the search box focuses on the speed, so it only searches for matching file names stored on your computer. If you find what you are looking for has appeared in the search box, you can go directly to step 3. If you still did not find what you are searching for and have completed your full search statment, you must follow the next step to refine your search in a more concise form.

**2. Determine the search on the computer or the internet**

On startup, the search box only searches for matching file names. If it does not find matching names, it directs the search to one of two categories at the top of the search list (along with filters):

- **My Documents:** Choose this category to restrict the search to items only on your computer. A window appears, as shown in Figure 838- with the results listed in a scrollable list. If you also see many items, you can narrow your search by clicking on the word Filter above the list, and choose one of the categories from the drop-down menu: All, Documents, Folders, Apps, Settings, Photos, Videos, or Music.
- **Web:** Choose this category to stop searching through the computer and instead directs the search directly to the Internet. Your web browser opens web pages that match your search. See Figure 837-, for example, when searching for Sheikh Al-Islam Ibn Taymiyyah, you will see several links that talk about the Sheikh once the first words of the search term have been written.

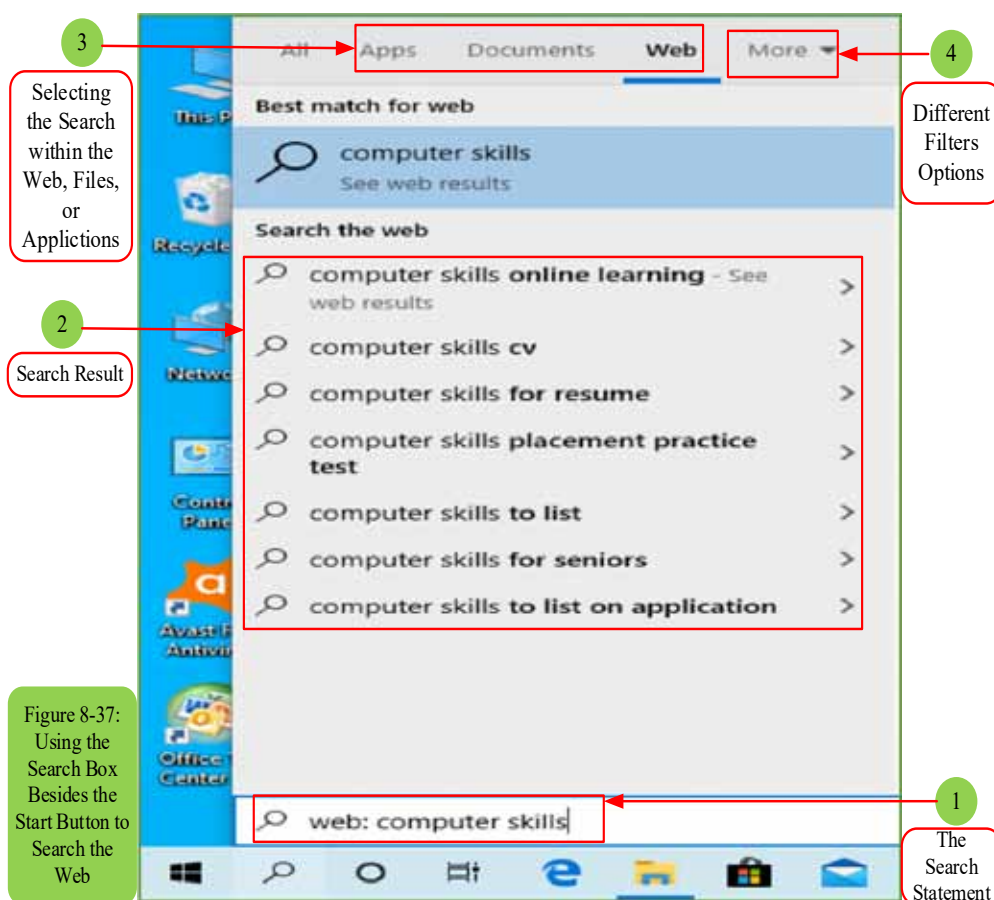


Figure 8-37:  
Using the  
Search Box  
Besides the  
Start Button to  
Search the  
Web

**3. The selection of the item that matches your search to be opened and displayed on the screen.**

Click on the file that matches your search directly from the list and it will open in the application corresponding to the file type. You can also find the location of the file on your device by right-clicking on the file in the list and you will find the phrase “Open file location”, which indicates the location of this file on your device.



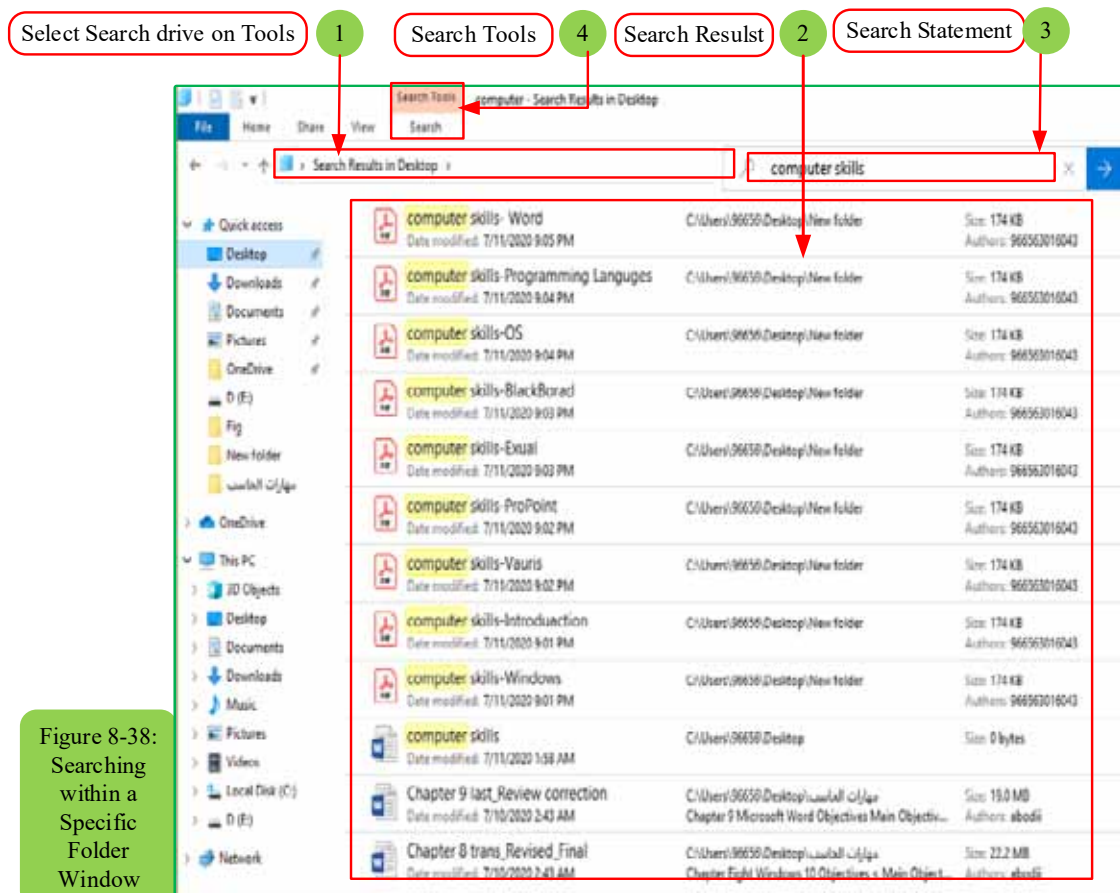
**To get the most out of the search feature:**

- For more speed in the Windows search tool, the search box lists files that contain only names that match your search term. While this strategy sometimes helps you to find quick matches, you will not find what you are looking for accurately unless you complete your search statement, then choose the search scope if you want files on your device or links on the Internet.
- Do not press (Enter) after typing in the search box. If you do this, Windows will call the first item in the search menu, which may not be what you want. Wait to see what matches your search, then click on the file or link you want.
- The Windows search tool scans every file in your documents, music, photos, and videos, which makes the storing of your files in those folders more important than ever.
- Windows Search Tool also scans every file you store on OneDrive, even if these files are not stored on your computer as well.
- Windows does not search for files stored in removable devices, such as flash memory, CDs, DVDs, or portable hard drives.
- If you are searching for a common word and the Windows search tool checked too many files, you can limit your search results by writing a short phrase for the word you want. The more words that you write, the greater your chance to define a specific file.

**Skill 8- 28****Using the Search Box in Windows Browser for Files****8-8- 2 Search through “search-box” of the files browser**

The results of the search tool in Windows can be excessive when you search within one folder on your device, as you search for a missing file inside only this folder. To solve this problem, Windows includes a search box for each folder through the Windows files browser. This search box limits the search to the files within this folder.

To find a missing file in a specific folder, click inside the folder search box and start writing a short word or phrase that indicates your missing file. Once you start writing letters and words, Windows starts filtering files inside your folder and continues to narrow your search until it displays a few files inside this folder as shown in Figure 8-38.



When the search box of the folder identifies a large number of possible matches, enter some other utilities through the “Refine” tab at the top of the filesbrowser to determine the best results. For example, select the option “date modified” to get the most recently modified files at the beginning, as shown in Figure 839-.

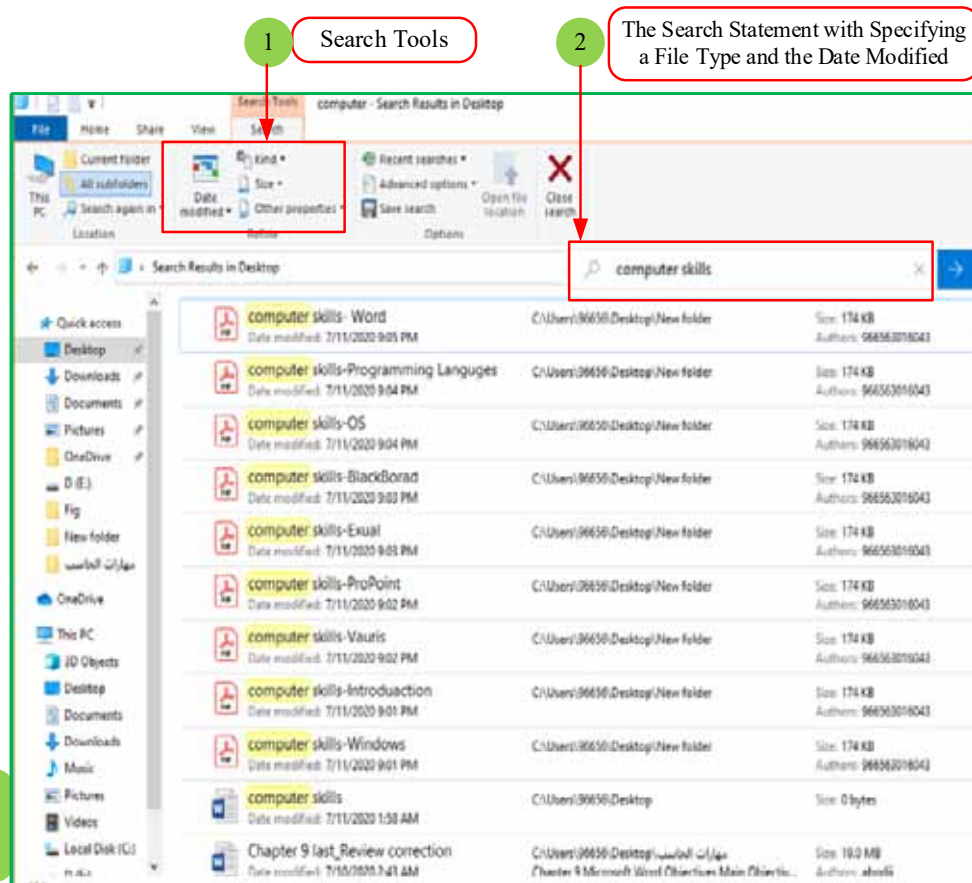


Figure 8-39:  
Refining the  
Search Tools

### 8 -8- 3 Search through Cortana digital assistant

**Skill 8 - 29**  
The Use of Cortana Digital Assistant of Windows 10



Windows 10 includes a friendly personal digital assistant called Cortana. Cortana is trying to simplify your life by finding not only your lost files, but also some information about you and your surroundings - for example, local weather updates, traffic information around your home, or perhaps a list of popular restaurants nearby. Cortana can even remind you of important dates and events. In fact, you can meet Cortana: because it is the mind next to the search box of the Start menu.

Cortana is constantly listening through the microphone on your computer and waiting impatiently for the term “Hey Cortana”. When Cortana hears these two words, it listens closely to the search statement and begins processing your request, as shown in Figure 840-.

Unfortunately, Cortana is not activated in some geographical regions, but you can use it if you change your geographical area and language in Windows settings to the United States of America and the English language, for example.

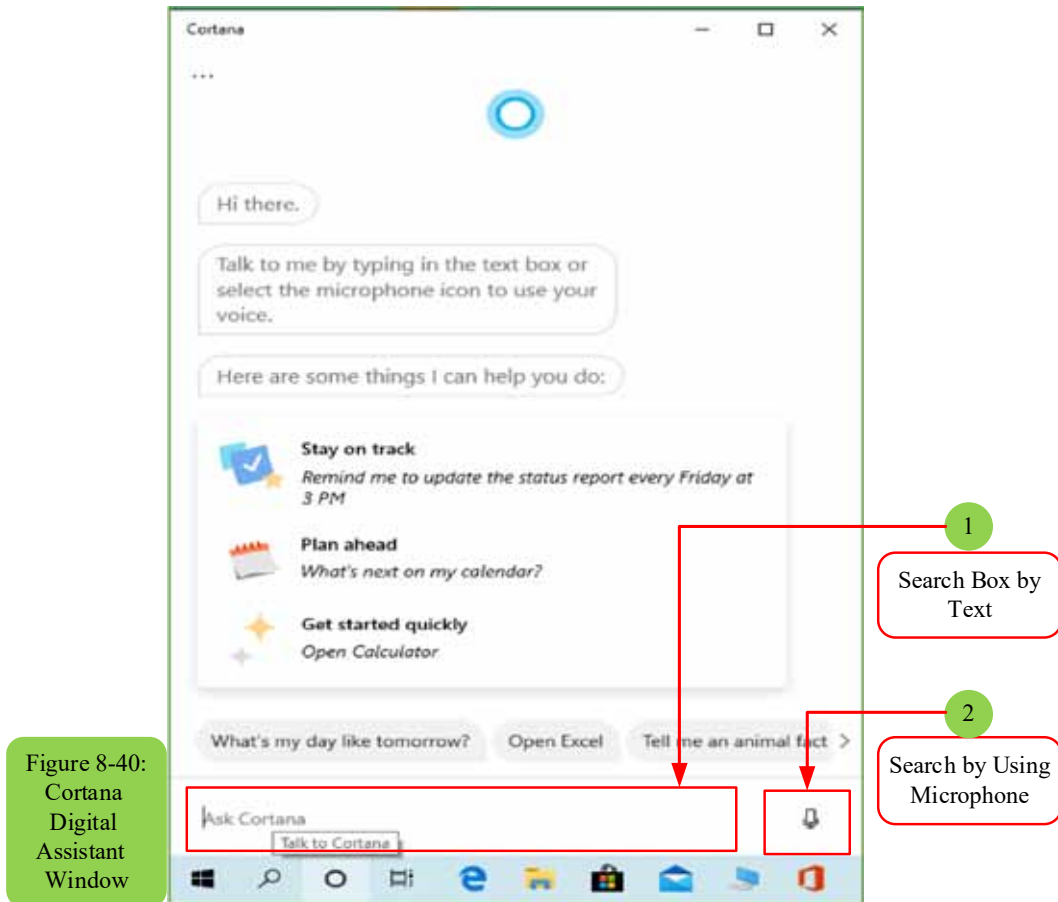



Figure 8-40:  
Cortana  
Digital  
Assistant  
Window

## 8-9 Windows Personalization through Control Panel

**Skill 8 - 30**  
Identifying the Two Control Panels in Windows 10



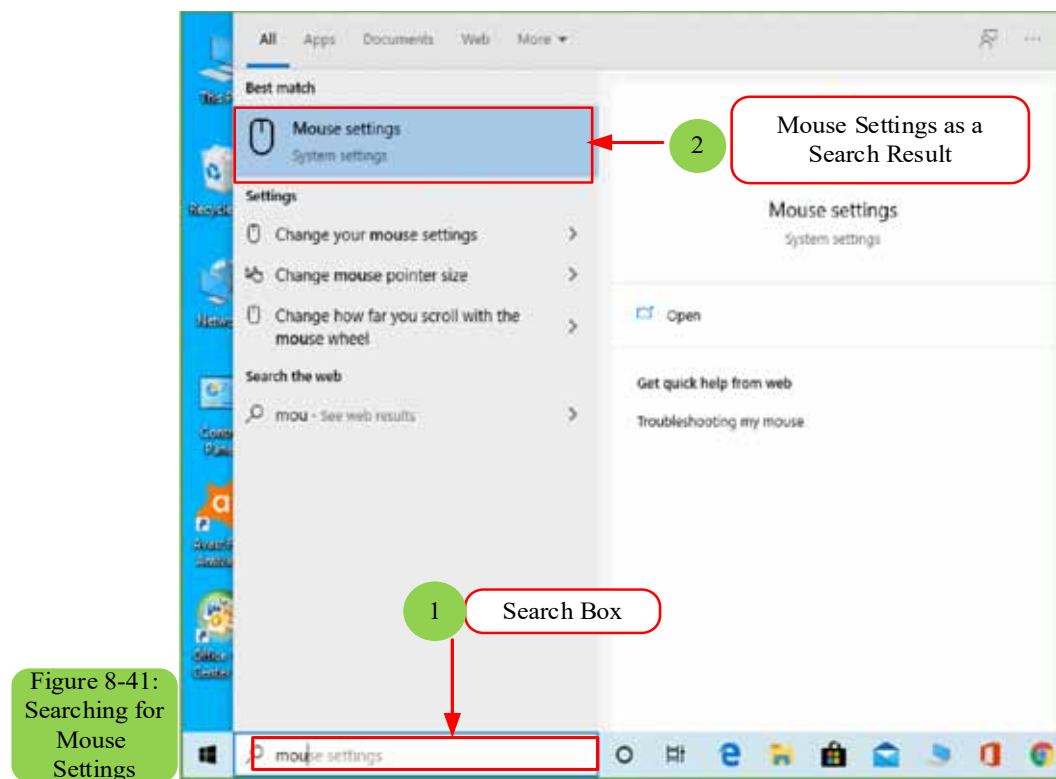
**Windows 10 has two control panels that you can switch between:**

- **Settings:** Settings can be accessed easily with oversized buttons. These buttons are now available with many other buttons that you may miss lots of operations without it.
- **Control Panel:** The control panel from the previous Windows version is still the same as in Windows 10.

Now, you do not have to disturbance from multiple buttons and the need to switch between two ways to access the required settings and enter the various

menus to find a way to change the settings of an application or attached device. Simply follow these two steps to get what you want:

1. Click the Start button, or click the adjacent search box, and type the search word describing the desired Setting. When writing the first letters, each Setting containing those letters will appear at the top of the search box menu. If you do not know the exact name of your setting, start typing the keyword like display, mouse, user, privacy, or something that describes your need.
2. Click the desired setting on the list. Windows takes you directly to the appropriate component for this setting in the control panel, as in Figure 8- 41 to search for mouse settings.



### 8 -9- 1 The Settings

**Skill 8 - 31**  
Working with the Settings in Windows 10



To open the Settings, click the Start button and click the word Settings near the bottom of the left pane of the Start menu. The Settings appears, as shown in Figure 8- 42. In fact, the Settings look almost identical to whether you're watching Windows 10 on a computer, tablet, cell phone, or even on a TV set.

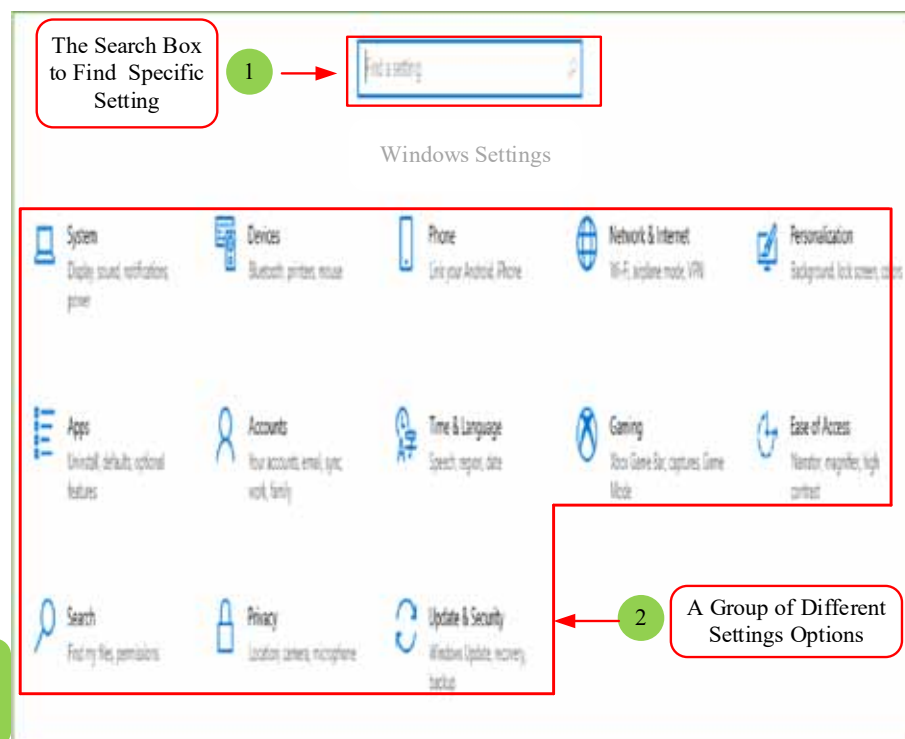


Figure 8-42:  
Windows10  
Settings

**The Settings divide into the following categories:**

- **System:** This huge category combines all settings related to the computer system. For example, you can find ways to adjust the screen, set the notification and events, adjust the power, storage units, etc., and even you find settings for how the Maps app interacts when you disconnect from the Internet.
- **Devices:** In Windows, devices are your physical items like a mouse, keyboard, printer, scanner. Thus, this field allows you to set the scroll wheel of the mouse, as well as how the computer interacts when inserting a memory card. Briefly, it is a mixture of settings that you find mostly by searching in the search box of the Start menu.
- **Network and Internet:** The settings for a Wi-Fi network on your default network are through the establishment of mobile internet connections, and others related to network and internet settings, you can find them all in this category.
- **Personalization:** In this category, you can choose a new desktop or screen lock photo, and the welcome’s photo when your computer starts up. You can also customize parts of the Start menu, etc.
- **Apps:** In this category, you can add or remove an application, and you can change application settings or move them from the device to a secondary storage medium, etc.

- **Accounts:** Here in this category you can create or change accounts of users use the computer, as well as to delete the accounts of those who are no longer welcome to use the computer. This category also allows you to change the password or account picture. If you are working on more than one computer, you can go to the Sync Your Settings section to control which settings should be linked to your Microsoft account.
- **Time and language:** Often you enter this category once at the start of setting up your device and forget about it afterward. It allows you to change your own time zone, adjust the time, date, and the corresponding formats for your region and set other settings related to your language and geographic location when the region changes.
- **Ease of Access:** These settings make Windows more suitable for persons with disabilities in vision and hearing.
- **Privacy:** Unfortunately, in this era, there is a little space of privacy left for us on the Internet! However, this section allows you to see the controls that Windows provides for you to limit the information that apps and websites gather around you. For example, you can control the apps that can access your site and control the camera, as well as those that can see your contact list.
- **Update and security:** You can often enter this category to set up your file to determine the backup date. Also, to familiarize yourself with the recovery area which provides powerful tools for troubleshooting.

### 8-9-2 Desktop Control Panel

#### Skill 8 - 32

#### Working with Control Panel of Windows 10



Although Windows 10 greatly supports the settings, sometimes you may need the control panel. This is because the Desktop Control Panel allows you to open Windows icons and setting tools. Part of the control panel's attractiveness and power is because it has about 50 icons, and some icons require menus with dozens of settings and tasks. It is also familiar because many of its settings have not changed in more than 20 years.

To open the Control Panel on the desktop, right-click the Start button and choose Control Panel from the pop-up menu.

To avoid searching for a long time to obtain the correct control icon, the control panel groups similar elements together under one category icon, as shown in Figure 8 -43.

Like Settings, the control panel monitors the search box in the upper-left corner to find settings that deal with a specific topic. If you move your mouse pointer over a main category, the control panel describes the settings available within that category.



Figure 8-43:  
Control Panel  
in Windows10

Some setting icons may not fall neatly within a category, even they may not be included in any category. To see each icon provided by the control panel, choose either large or small icons from the drop-down menu next to the word “View by”, as shown in the upper right corner of Figure 844-. The window quickly displays all control panel icons.

The contents of the control panel may vary from device to device, as shown in Figure 8- 44. Because different programs and other computer accessories often add their own icons to the control panel. Also, different versions of Windows may also have slightly different icons. Leave your mouse pointer over any icon or category in the control panel, and Windows will explain its meaning.



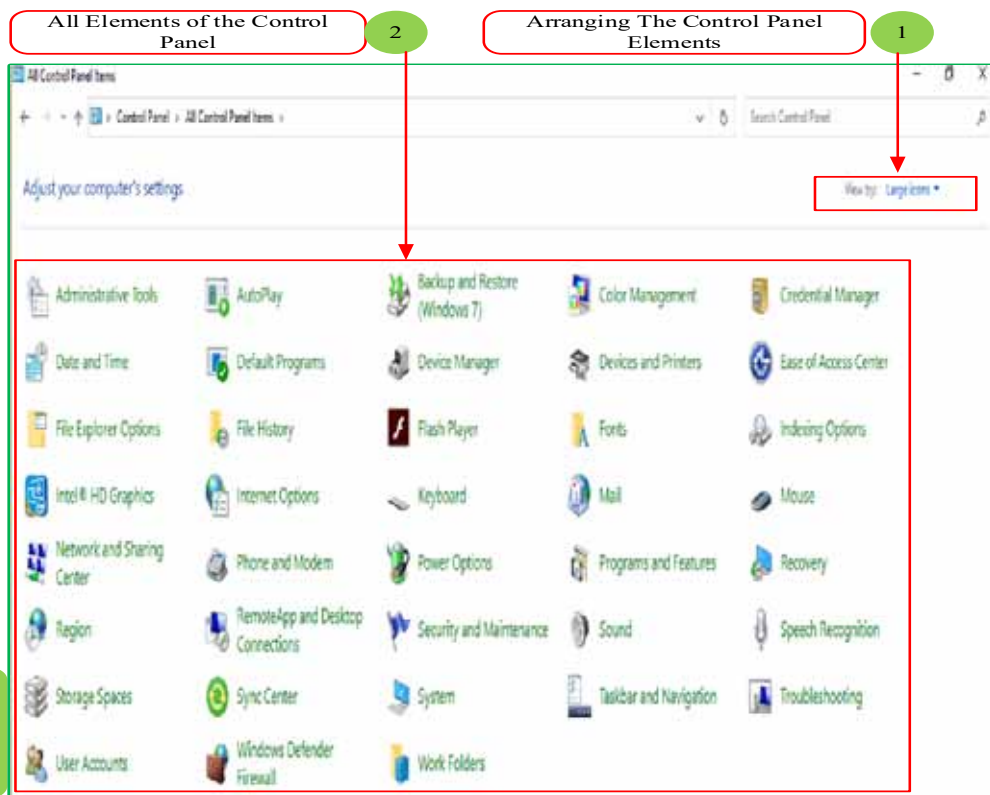



Figure 8-44: Elements of The Control Panel in Windows 10

## 8- 10 Add or Remove Apps or Programs

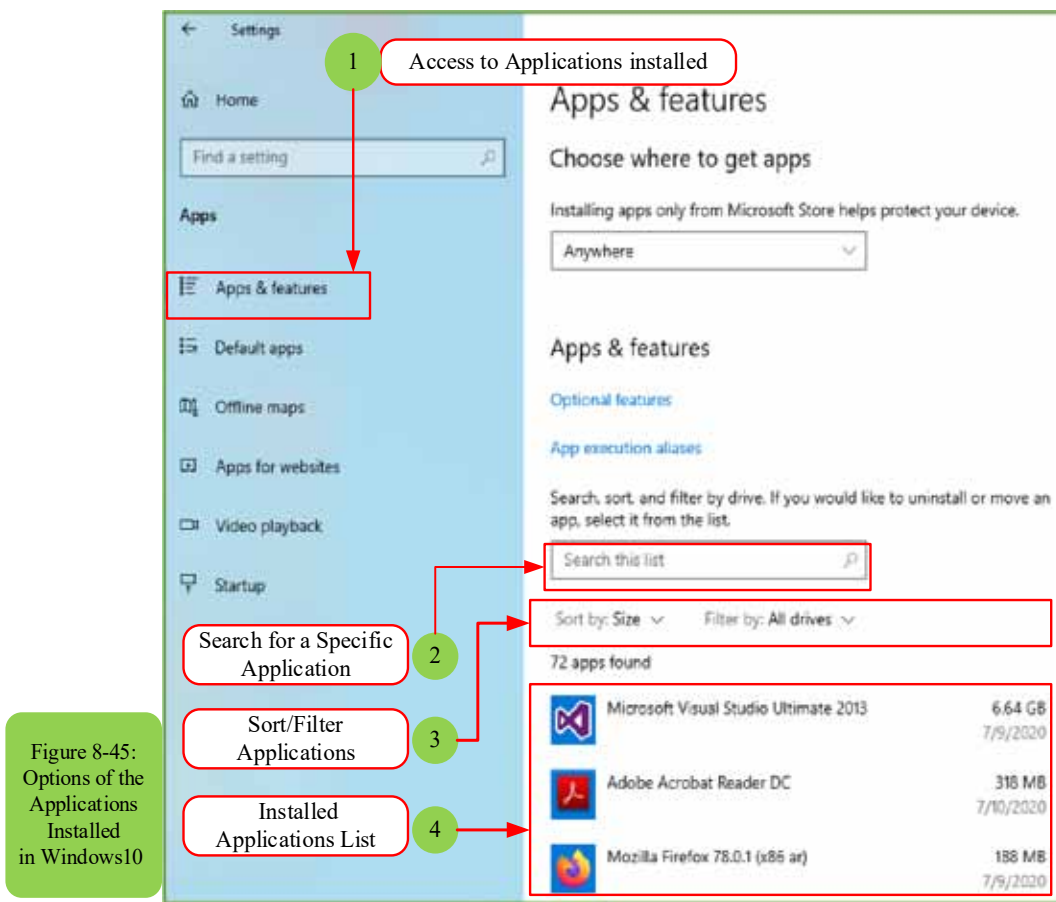
**Skill 8- 33**  
Add, Remove or Modify Apps and Programs in Windows 10



Removing the application from your Start menu does not take much effort. Just right-click the app name from the Start menu and choose Uninstall from the popup window. But this procedure does not completely remove the app from your device! Rather, the application is removed only from the Start menu.

**To completely remove the app or program from your computer, follow these steps:**

- Click the Start button and choose Settings from the menu, the Settings will appear.
- Click the App icon, when the app’s window appears, click Apps and Features at the left pane of the window. The Installed Apps and Features window appears, as shown in Figure 8- 45, where the currently installed apps and programs are listed according to size.



To sort programs by installed date, click the “Sort by” button and choose “Installed on” from the pop-up menu.

- Click the program you want to remove, then click the Uninstall or Move button.

Depending on which button you click on, Windows either removes the program or app from your computer or moves it to another drive or memory card.

- In case of using a tablet, click on one of the listed programs, and two buttons appear below it:

- **Move:** When your storage space is exhausted, choose this option. It allows you to move the app or program from your tablet device to the memory card, and free up space for your files.
- **Uninstall:** Click on this button - then on the Confirm button - to completely remove the app or program from your computer.

**Skill 8 - 34**  
Adjusting Time and Language Settings in Windows 10



**8- 11 Time and Language Settings**

Microsoft designed the time and language area mostly in the settings for travelers to different time zones and other locations. Users of desktop computers usually see this information only once when first setting up the computer. Windows later remembers the time and date even when your computer is turned off.

As for users of laptops and smart devices, they will need to enter that region when visiting different time zones at a universal time. Computer users will also enjoy the bi-lingual computer feature, with settings that allow characters from different languages.

To change language and time, click the Start button, choose Settings from the menu, and click the Time and Language category. Three sections appear as in Figure 8- 46:

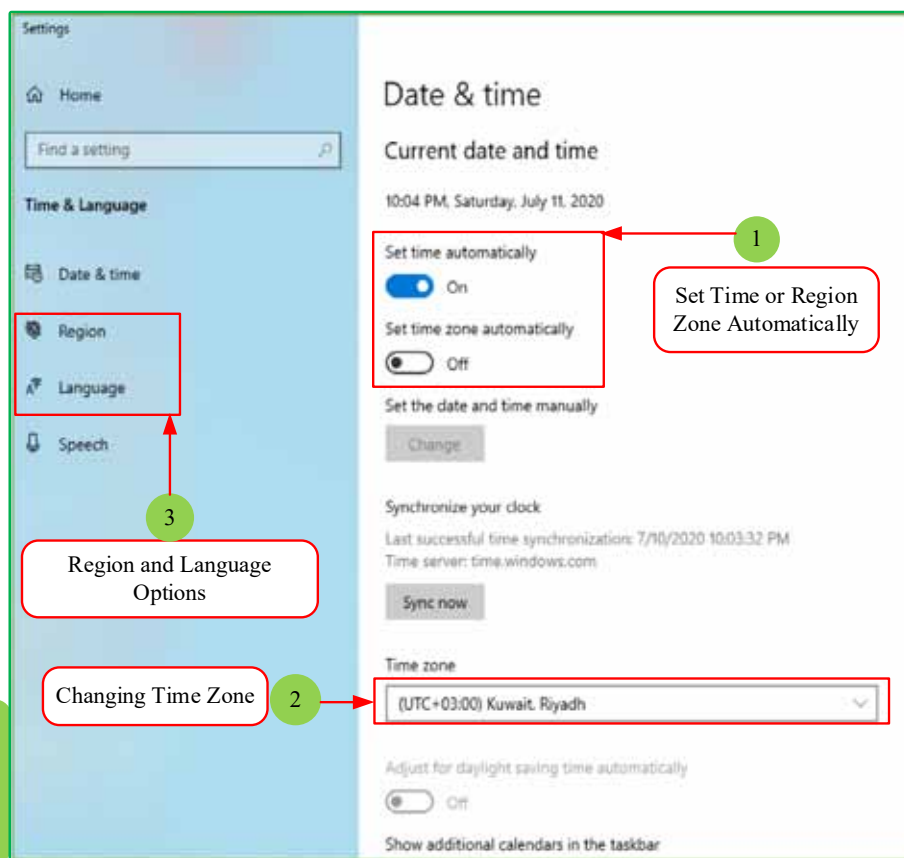


Figure 8-46:  
Date and Time  
Options  
in Windows10

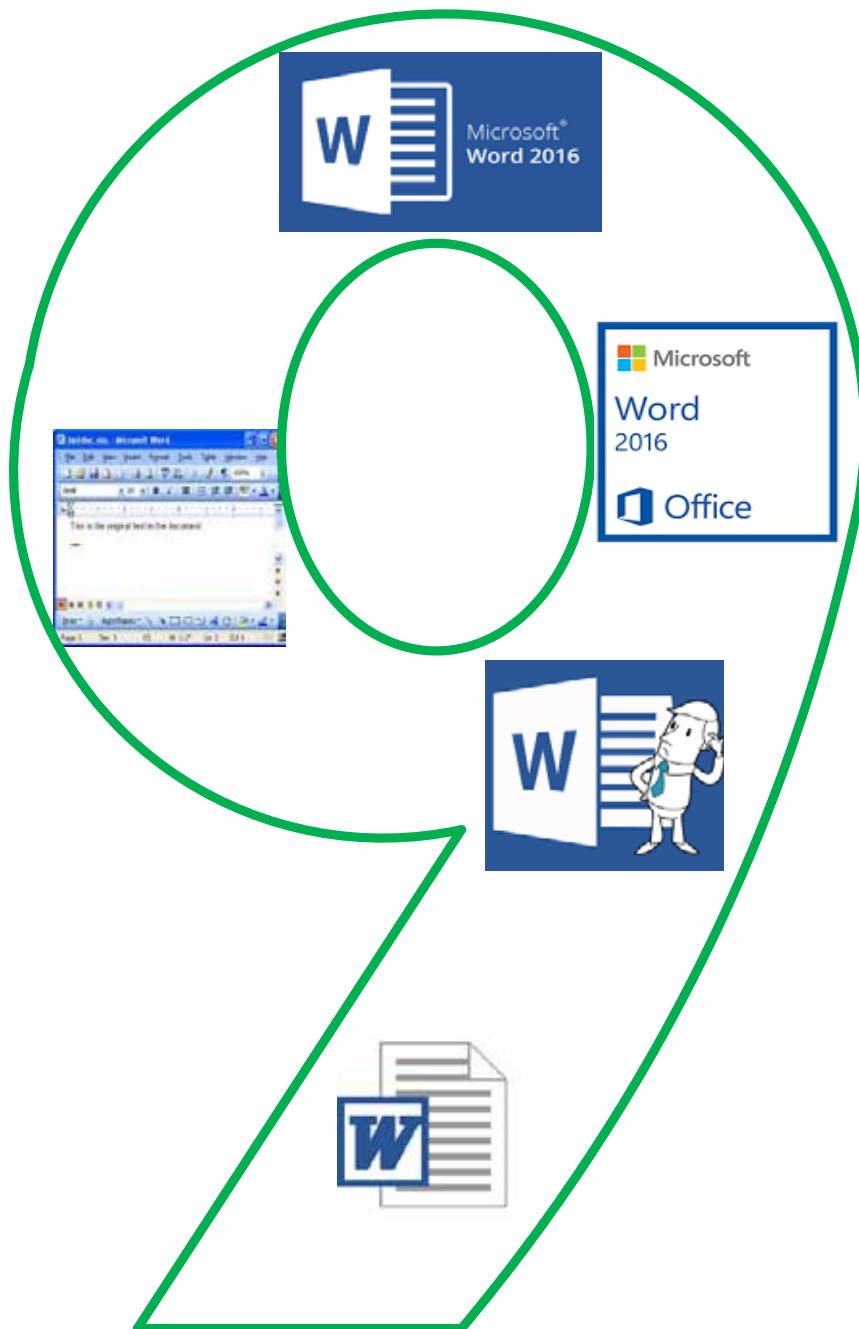
- Date and time: This area is somewhat self-explanatory. (it allows clicking on the taskbar clock and choosing to change the date)
- Region and Language: If you are bilingual or multilingual, move to this area when working on documents that require letters from different languages.

***Use the control panel with your laboratory teacher to perform the following tasks:***

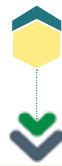
1. Create a new user account on your device.
2. Change your profile picture and password.
3. Change your desktop wallpaper.
4. Handle the selection of a screen saver.
5. Change the themes of the computer.
6. Change the screen resolution.
7. Adjust sounds and its intensity.

# Chapter 9

## Microsoft Word







## Microsoft Word 2016

### Objectives

#### ➔ Main objectives:

1. Dealing with Microsoft Word2016

#### ➔ Sub-Objectives

It is expected from the student after studying this chapter, to master the following knowledge and skills:Recognize the operating systems and their main functions and types.

1. Identifies word2016 interface elements.
2. Creates a new file in Word 2016.
3. Recognizes and deals with Wordtemplates2016.
4. Knowshow to manage and edit documents.
5. Knowshow to view and print documents.
6. Knowsabout the basic editing processes and patterns.
7. Knows searches and inferences.
8. Knows the insertion of the head and the tail of the page.
9. Knowsinseration of illustrations graphs
10. Recognizes the inclusion of shapes and symbols.
11. Master the insertion processes of Tables



## 9 -1 Introduction to Microsoft Word 2016:

Microsoft Word 2016 is one of the most important programs produced by American Microsoft company for text processing, and it is used by millions of users around the world to manage office business by providing the latest editing and auditing tools for writing documents, messages, researches, and coordinating various processes on them and preparing them for printing, sharing or transmitting.

### *Microsoft Word Features 2016:*

*Word 2016, the latest version of the word processing software package, it has many of features, including:*

1. Co-authoring with anyone anywhere: It is possible to co-work on the same Word document at the same time as a many of people who can edit the document and co-output it.
2. Share simplified documents: it is possible to shared as well as access to Word documents saved in SharePoint or OneDrive
3. The ability to send large files using One Drive: The user can save large files in the OneDrive cloud storage service
4. Smart Search: One of the most important features of Word 2016 is smart search through which a word can be identified within the specific document and then we click the right mouse button to do a search for that word through Bing search engine.
5. Charts and graphs: A new set of charts and longitudinal and horizontal squares were more flexible and evolving than previous versions.
6. SKYPE Integration

This feature enables businessmen to use SKYPE from within Word, now you can answer video calls or messages without having to exit the document that's working on it.

## 9 -2 Starts Using Word 2016:

### *9 -2- 1 Running Word Processing Software (Word 2016):*

**Skill 9 - 1**  
Running the Program from the Start Menu





*To run the program from the Start Menu follow the following steps:*

1. Click the left mouse button on the Start button.
2. A list of all programs and applications installed on your computer is appeared and click on 'Word 2016' as in figure (9 -1), the program will start running.

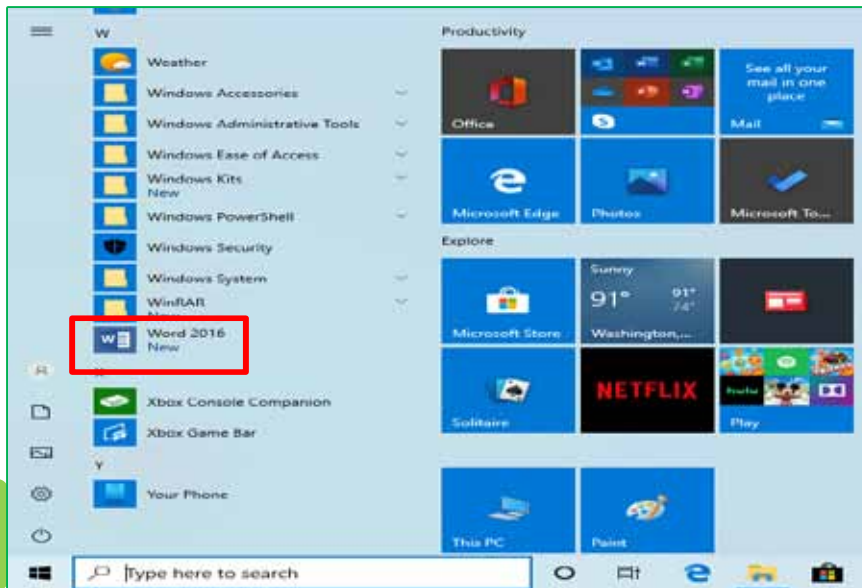


Figure 9-1:  
Running MS  
Word by  
Using Start  
Button

**9 -2- 2 Close the Word Processing Software (Word 2016):**

## Skill 9 - 2

### Close the Program

*To close the program, follow the following steps:*

- Click with the left mouse button on the 'Close' icon in the address bar at the top left of the window that ends the program as figure (9 -2)

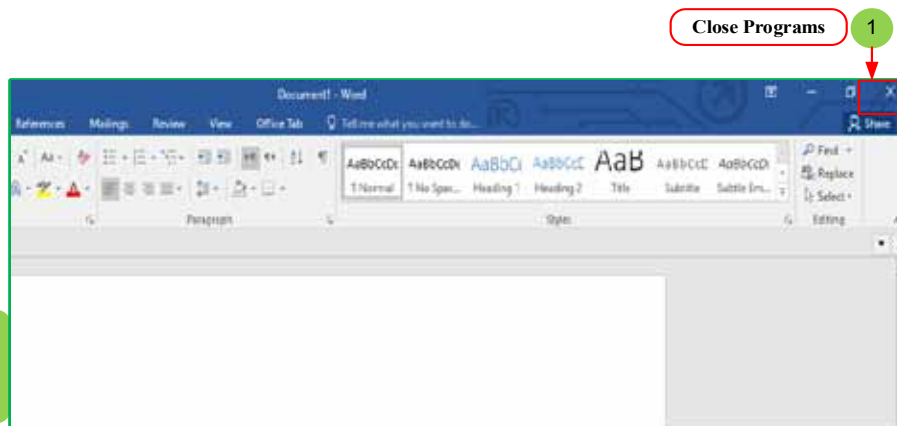


Figure 9-2:  
Close MS  
Word  
Programs

9-2 -3 Components of the Text Processing Window (Word 2016):

**Skill 9 - 3**  
Knowing the Components of the Program Window

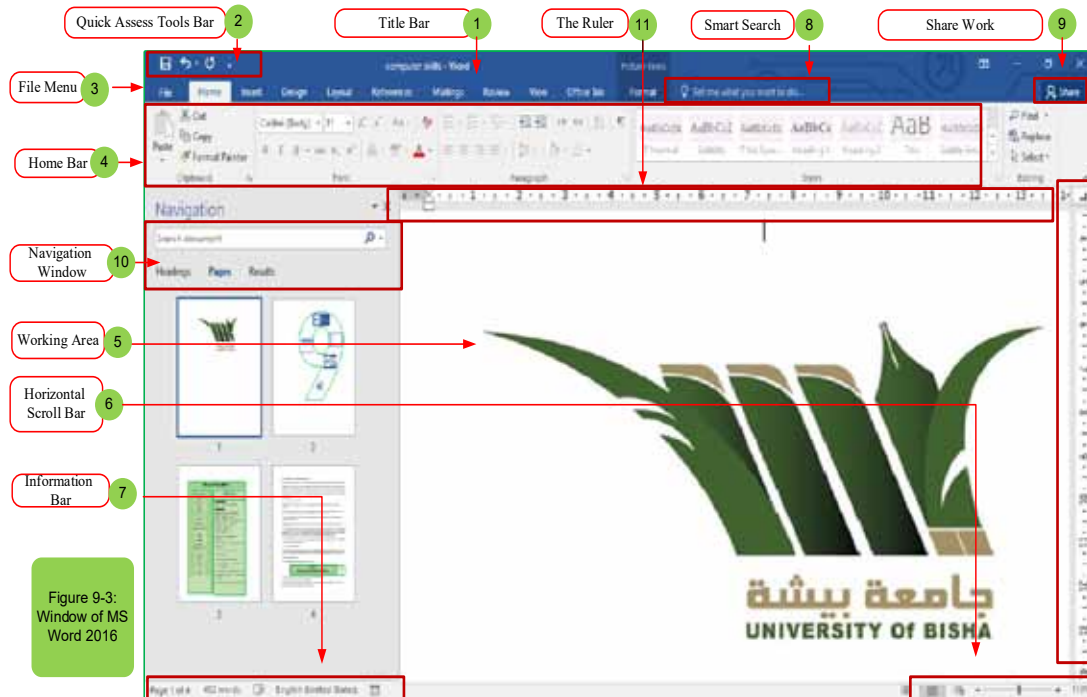


Figure 9-3:  
Window of MS  
Word 2016


1. Title Bar: Displays the file name of the edited document and the name of the program you are using and also includes the usual control buttons (zooming out, restoring, closing)
2. Quick Access Toolbar: Contains commonly used commands such as (save, undo and replay) and at the end of the Quick Access toolbar there is a drop-down menu where you can add other commands that you use or need a lot.
3. File tab: Through which processes are interacted on the document itself and not with its content (new, open, save as, print, close.)
4. Ribbon: A set of toolbars at the top of the program window after the address condition to help the user access commands.
5. Work Area: Displays the contents of the document you edit.
6. Horizontal scroll bar: Allows you to change display options by using a scroll (zoom) to control the size of the document window.
7. Status bar: Displays information about the document you are editing (number of pages words, etc).

8. Intelligent Search: Allows you to search for Word commands, get help and search the web
9. Work sharing: Allows you to share work with others by inviting specific people to view and edit archived documents on the cloud.
10. Navigation window: Allows you to navigate document pages and navigate within the document
11. Rulers: Allows you to adjust the width and length of the page and there are two horizontal and vertical rulers that can be controlled by showing and hiding.

**9 -2 -4 Create Blank Document:**

### Skill 9 - 4

## Create Blank Document



*To create an empty document, follow the following steps:*

1. After opening the program click on the template 'Blank Document' with the left mouse button and a document will be created and opened. If you want to create a new document in another way, click 'File', click 'New' and click on the 'Blank Document' template, see Figure (9 -4)

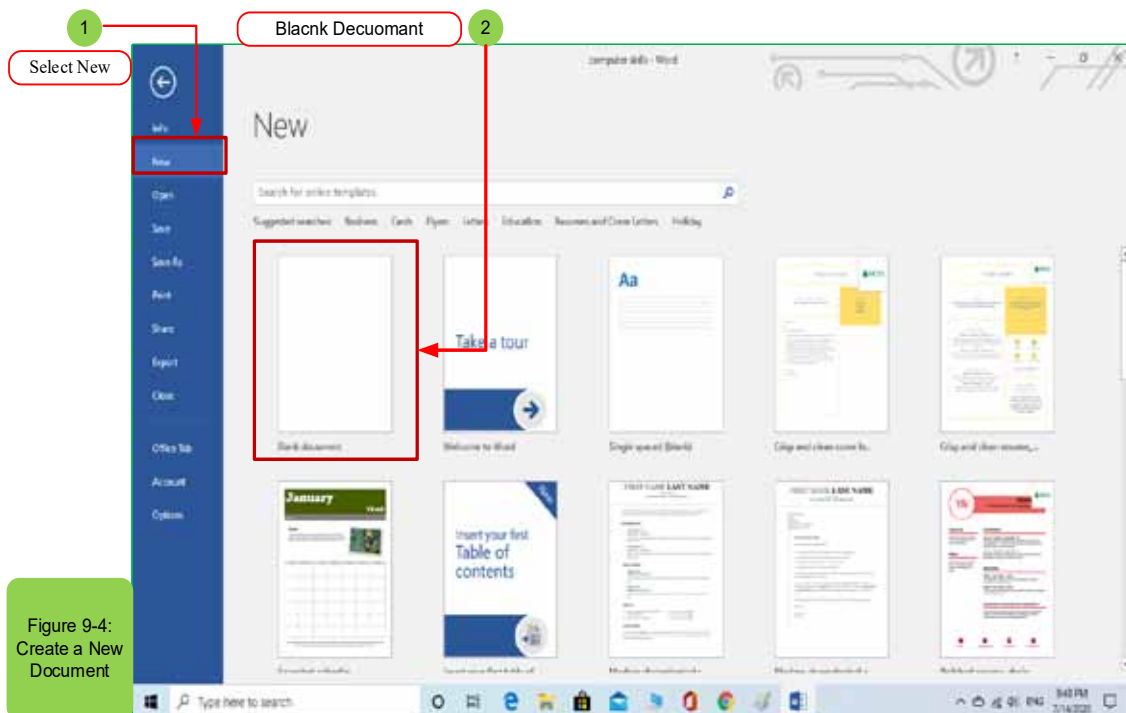



Figure 9-4:  
Create a New Document

**9-2-5 Create Document Using Word 2016 templates:**

**Skill 9 - 5**  
Create Document Using Word 2016 templates



There are two types of templates, namely Word 2016 and online templates, word 2016 templates have been installed and stored on the computer, when installing the word processing software and the program includes a wide range of templates enough to get started.

To create a document using ready-made Word2016 templates, follow the following steps:

1. Click the left mouse button on the <File> tab
2. Click on <New> window will appear with a number of ready-to-use templates
3. Choose the suitable template for you, for example, we want to choose a template to create a resume file that we select and then click on <Create> as the form (9 -5)

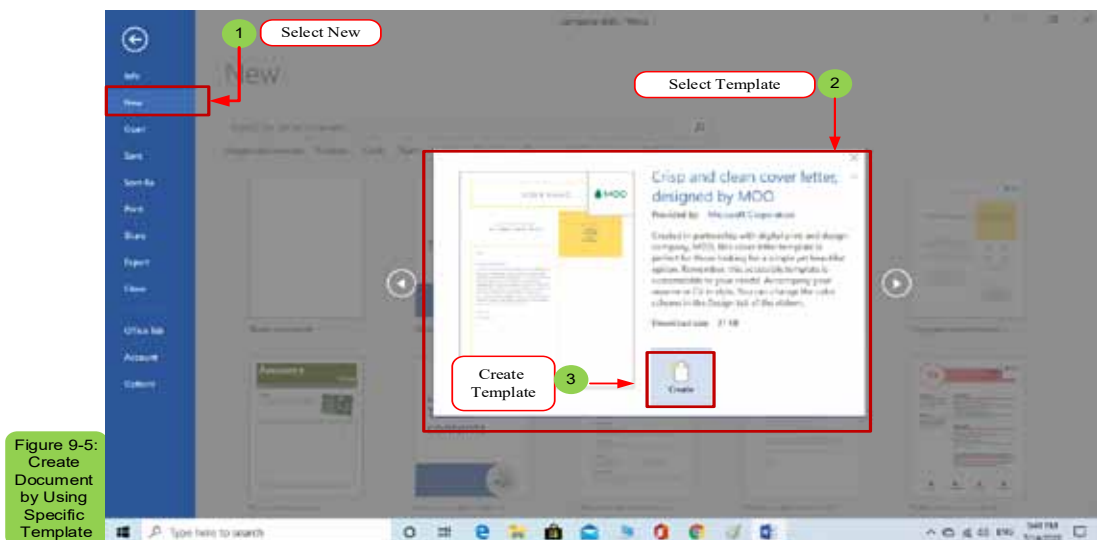



Figure 9-5:  
Create Document  
by Using  
Specific  
Template

**9-2-6 Create Document from Online templates:**

**Skill 9 - 6**  
Create Document from Online Templates



**To create a document from the internet, follow the following steps:**

1. You must have an Internet connection.

2. You must have an Office login account and office.com site will provide to you a many of ready-to-use templates.
3. To search for a template from the Internet choose from the <new> file tab, then type the name of the template in the <Home page> box as in the figure (9 -6), then click on <Search> the search results for the template you selected for example we want a certificate template.
4. You'll also find templates created by Word 2016 word processing users who have uploaded their work to share with others.
5. To create a document of online templates choose the template category online and select the style you want and click on a download.




Figure 9-6:  
Create Document by Using Internet Template

**9 -2- 7 Save Document:**

### Skill 9 - 7

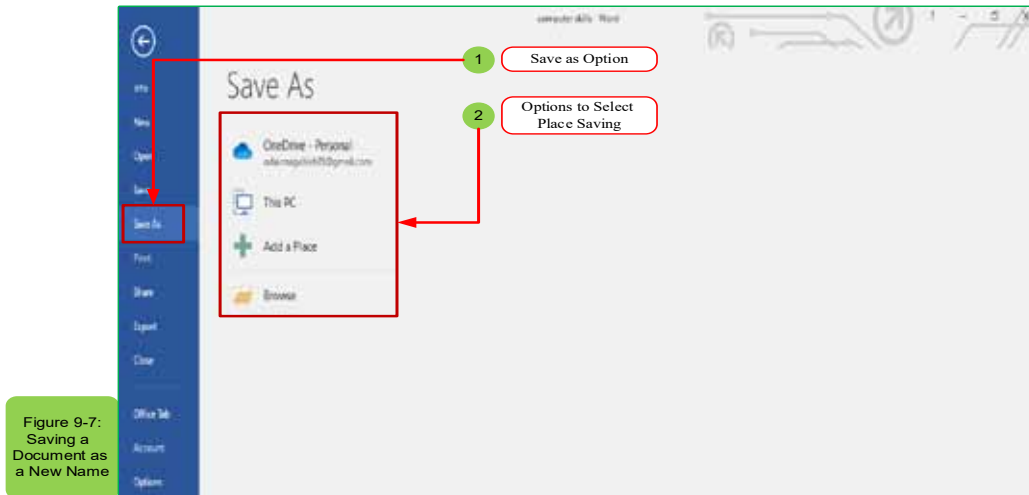
## Save Document



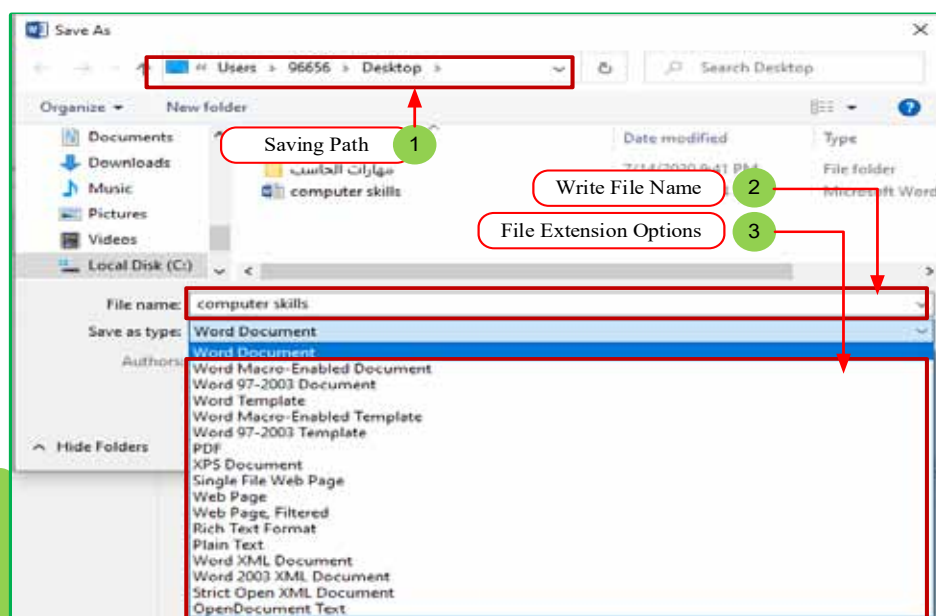
Newly created documents that usually saved in the name of a particular file that is closely related to the content of the document so that you can locate the file as quickly as possible after editing your existing document. You can choose to save that document in the name of a new file or format a different file, when you save a document such as the cloud and 'OneDrive' you can access this document on any computer or tablet and can share it with others.

**To save a document in the name of follows the following steps:**

1. From the 'File' tab click on 'Save as a Name'
2. A saved dialog box with a name with save place options will appear either on your PC or on a different place such as One Drive or adding another place as in figure (9 -7)




3. The file save window will appear, in the file name box write the file name for example computer skills and then choose the type of document (if you press the save button the file will be saved by the type (docx) and in the document folder) by default and then close the document as figure (9 -8)
4. Or you can save from the Quick Access toolbar or quick save by clicking on ctrl+S keys.
5. Click 'OK' to save.



**9 -2- 8 Open Document:**

**Skill 9 - 8**  
**Open Document**



Word 2016 provides the possibility to open the last files as well as the oldest files.

1. From the 'File' tab click on 'Open.'
2. The navigation part will appear as the figure (99-)

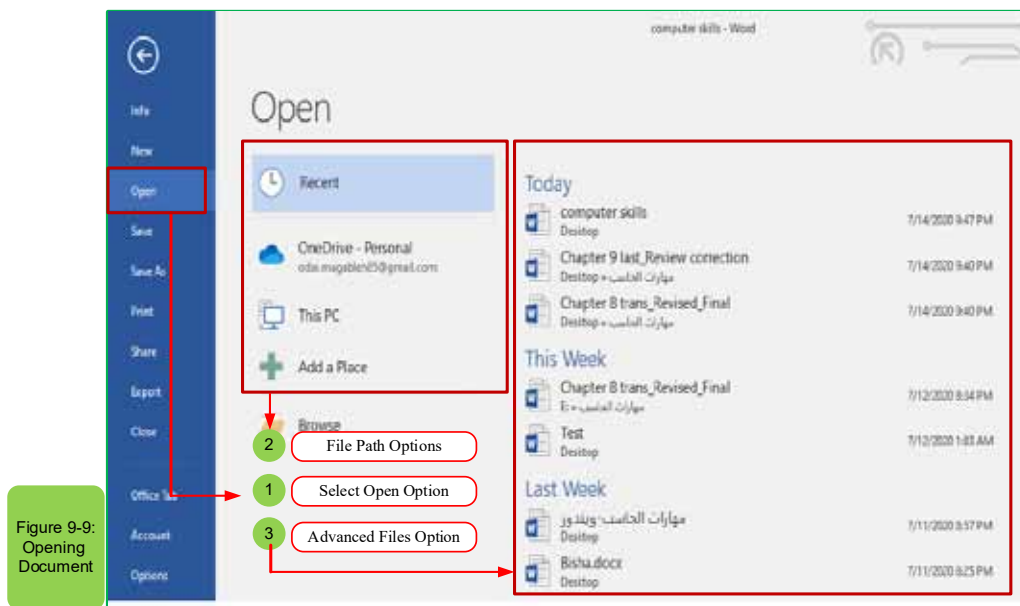



Figure 9-9:  
Opening Document

3. Click on the local disk that contains the work files, then double-click the folder that contains the document, and then double-click to open the document.

**9 -3 Basic Editing Processes:**

**9 -3- 1 Select and Edit Text:**

**Skill 9 - 9**  
**Select Text**



*You must first select and edit the text to do so follow the following steps:*

1. Select text using the keyboard or with the mouse.

2. If you use the mouse to select the text, click with the constant pressure and drag of the mouse.
3. If you use the keyboard to select the text click on the SHIFT key and the appropriate arrow of directions arrows
4. The text will appear shaded (usually in blue) when it is selected as the figure (9 -10)

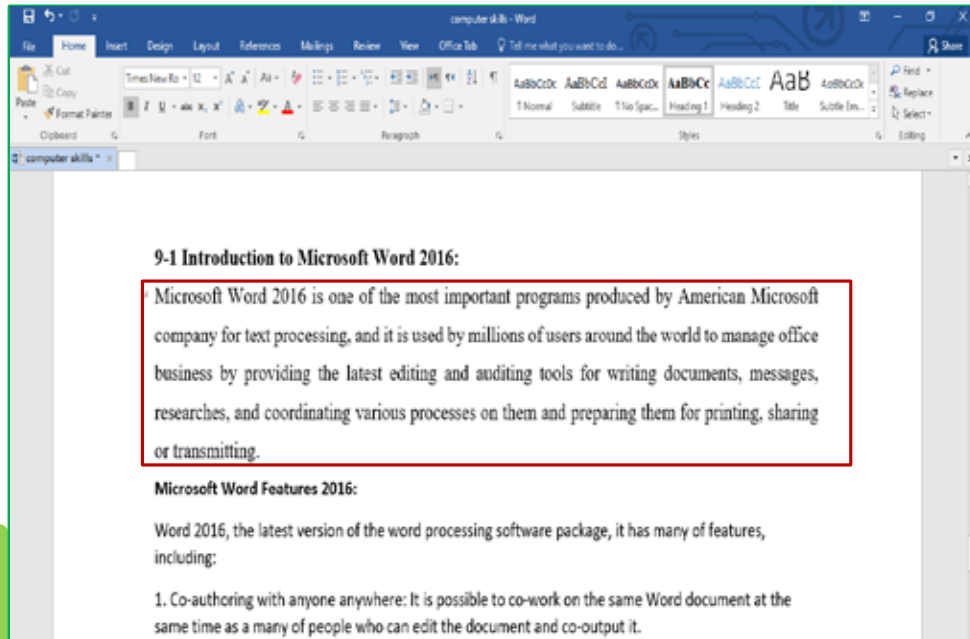


Figure 9-10:  
Selecting  
and Editing  
Text

Deleting Letters and words without being selected using keys:

To delete the letter that precedes the writing indicator	Backspace
To delete the text from the writing indicator to the beginning of the word	Ctrl+Backspace
To delete the letter that follows the indicator	Delete
To delete the text from the writing indicator to the end of the word	Ctrl+Delete

### 9- 3 -2 Navigation, Search and Replacement:

- Use the navigation tool to find text within the document:

**Navigate within the document can be through using the following means:**

1. The Mouse
2. The Keyboard
3. Scrolling bars
4. Dialogue box Go to



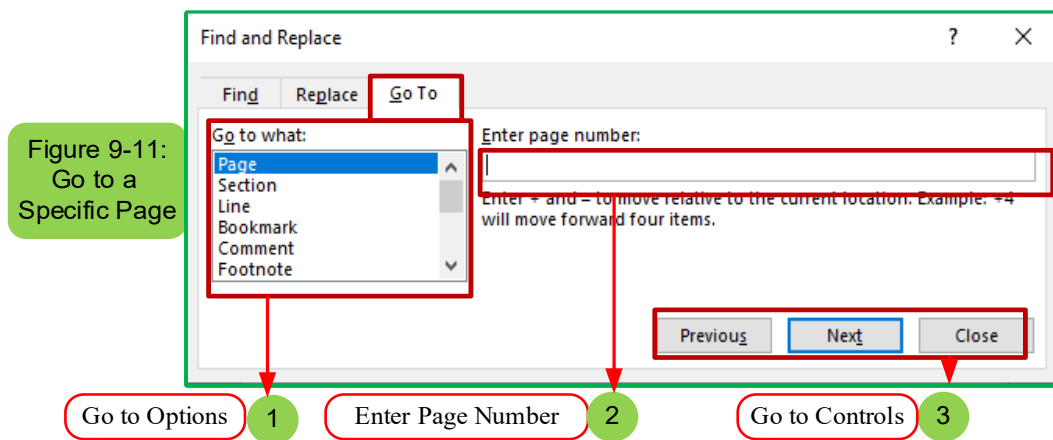
● Using Dialogue Box Go to:

**Skill 9 - 10**  
Move to Inside the File




To use the move to dialog box follow the following steps:

1. From the 'Home Page' tab and from the 'Edit' group click on the icon's arrow 'Search' at the far left of the 'Home Page' tab and click on 'Go to'
2. The 'Search and Replace' window will appear from which the 'Go To' will appear as in figure (9- 11)
3. Write down the page number to which you want to go.



● Search:

**Skill 9 - 11**  
Serach in the Document



With Word2016, you can search for a word or phrase within the document, or search for a specific text and replace it with another text to search for a word within the document follow the following steps:

1. from the 'Home Page' tab and from the 'Edit' group click on 'Search' icon
2. The 'Search and Replace' window will show which choose 'Search'
3. Type the word you would like to look for, for example, the word (insert) as in figure (9- 12 )
4. Click on (Find the Next)

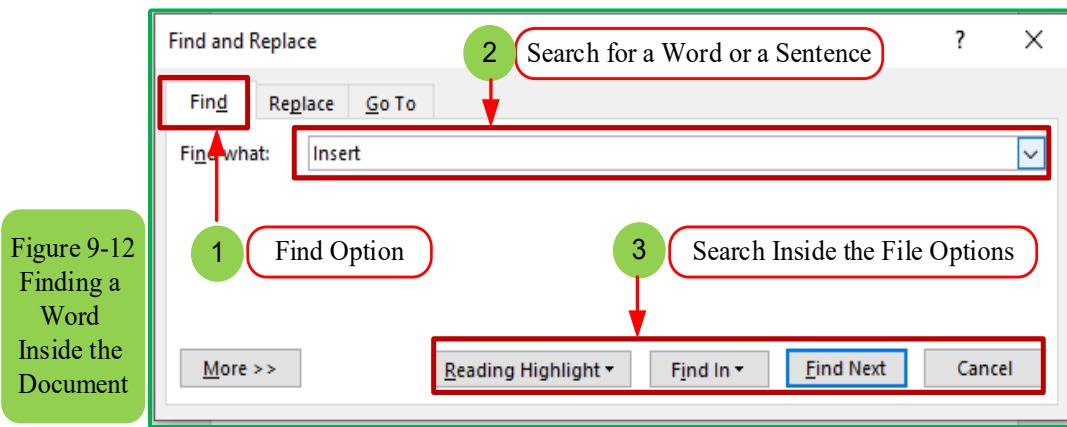


Figure 9-12  
Finding a  
Word  
Inside the  
Document

5. The result of the search inside the document will appear shaded as it appears in figure (9- 15)

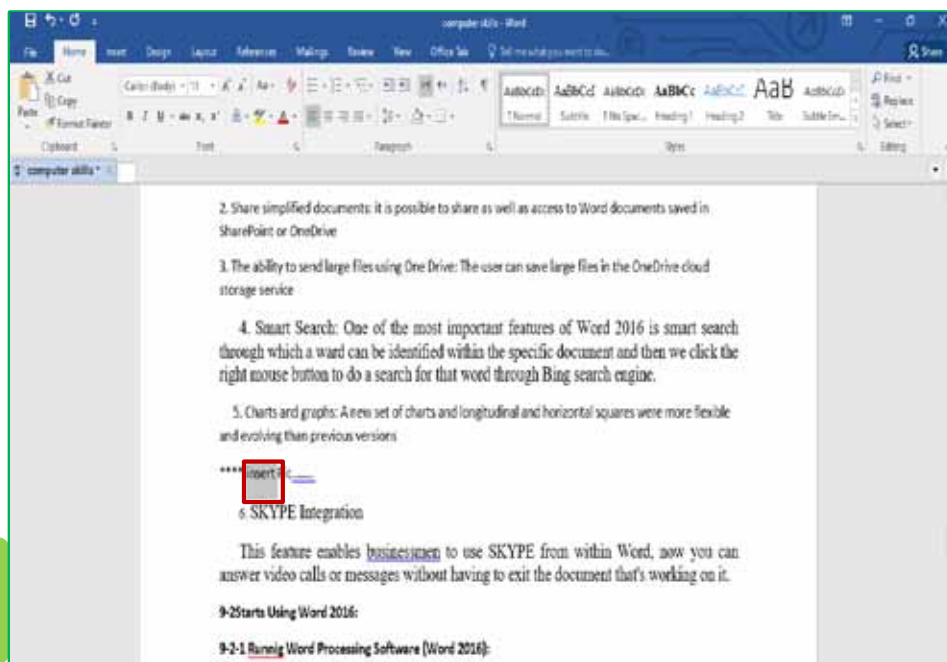



Figure 9-13:  
The Searched  
Word Result

- **Replacement:**

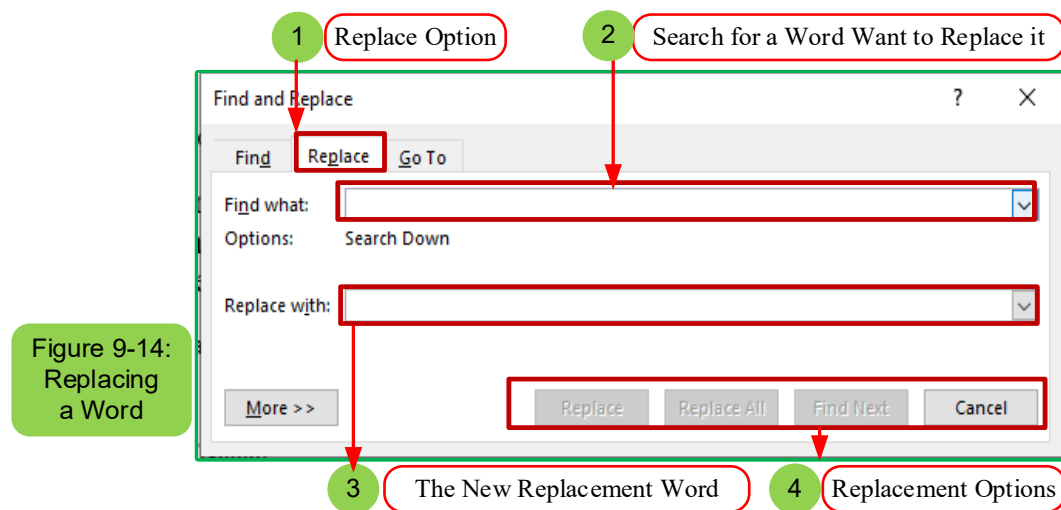
**Skill 9 - 12**  
**Serach and Replace**



Replacement is used to search for a word within the document and replace it with another word, for example, to replace the word 'pattern' instead of 'thesis', we follow the following steps:

1. From the 'Home Page' tab and from the 'Edit' group click on the icon 'Replace'

2. The 'Search and Replace' window will appear from which to choose 'replace.'
3. In the search box write the word you want to replace
4. In the dialog replaces type the word to be placed instead of the replaced word as in figure (916-)
5. Click the 'Search for next' button where the first appearance of a word that matches what was written in the search box is selected.
6. Then click the replacement button to replace the word as the figure (914-)
7. There are options for replacement (replace, replace all, search for the next, cancel the order) you can use as needed for replacement.



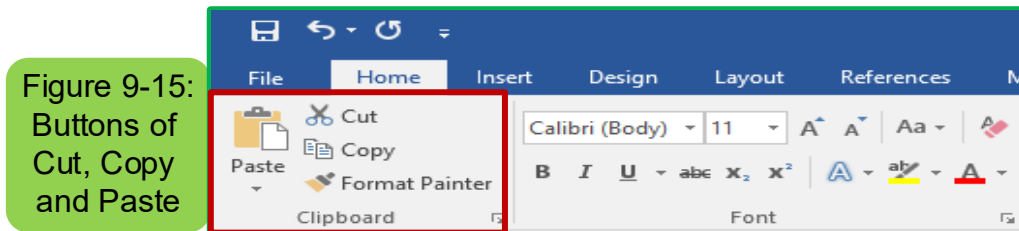
### 9- 3- 3 Cut and Copy and Paste:

**Skill 9 - 13**  
Cut and Copy and Paste

**Cutting, copying and pasting skills are main skills in Word 2016 and to use these skills we follow the following steps:**

1. Select the text you want to copy or cut.
2. Click the cut button or copy from the 'Home Page' as in figure (915-)
3. Or you can right-click on the text and choose 'Cut' or use the Ctrl + X shortcut.
4. Click with the right button in the place you want to put the text and choose 'copy' or use the Ctrl + C shortcut.

5. Click with the right button on the text and then choose «paste» or use the «Ctrl+ V.» Shortcut or from the «Home page» tab and from the «Clipboard» group click the «Paste» button as figure (9- 15)



## 9 -4 FormattingProcesses:

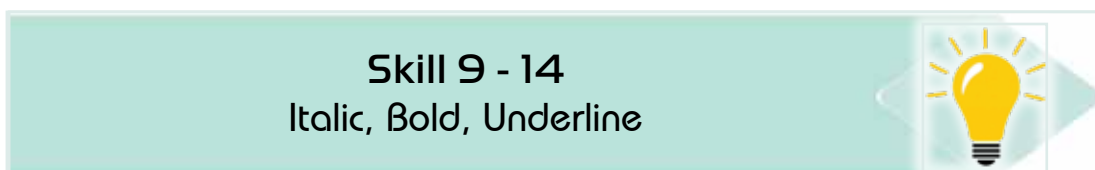
Text format is the processes that are made on the text and include (change the size font and colour, style, and other formats)

### 9.4.1 Copy Format:

The text format can be copied within the same document or between other documents.To copy the text format:

1. Select the text that contains the format you want to copy elsewhere.
2. Click the «Copy format» button in the «Home page» tab as in figure (916-) or you can use the shortcut (Ctrl+Shift+C) from the keyboard to copy the format
3. The cursor will turn into a drawing brush.
4. Choose the new text and it will take the same old text format.

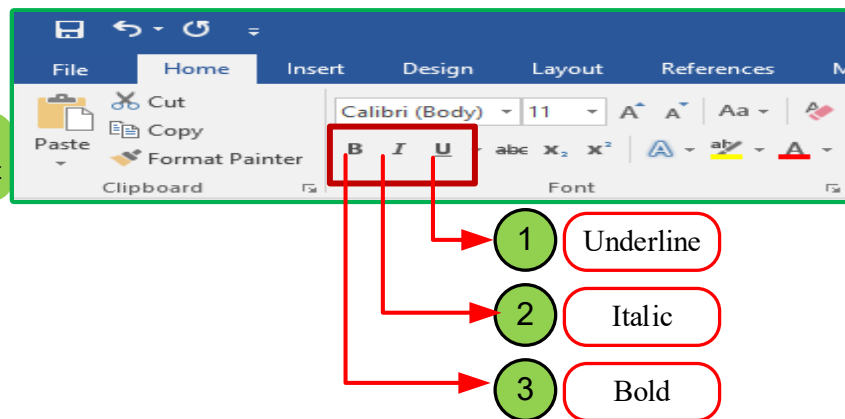
### • 9.4.2 Italic, Bold,Underline:



**To apply a format (Italic, bold, and underline), follow the following steps:**

1. Select the text you want to format.
2. From the 'Home Page' tab and from the group's 'font' click on the format (Italic, bold, and underline) you want as in figure (9- 16)

Figure 9-16:  
Font Format



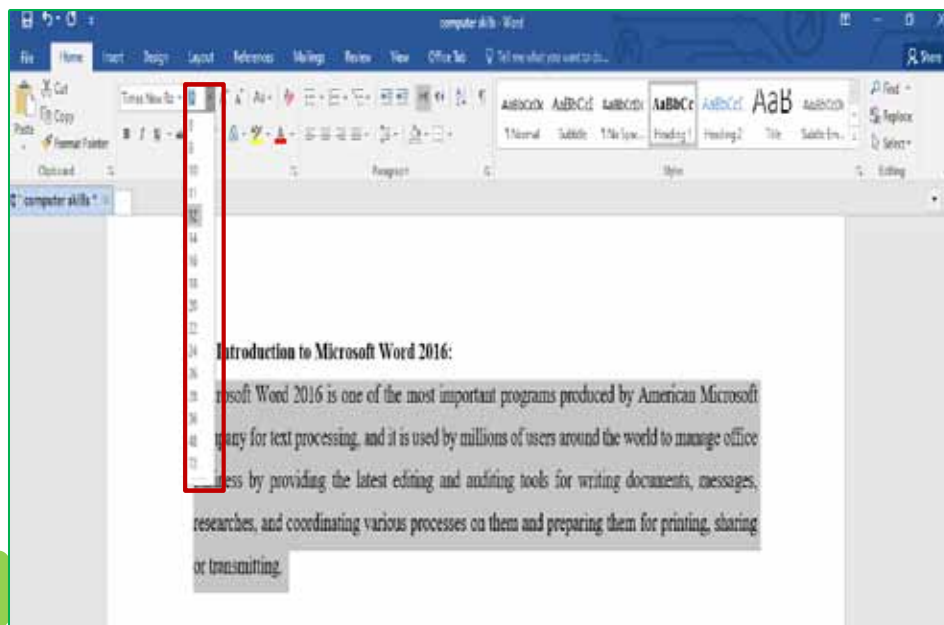
**9-4-3 changing the Font Size:**

**Skill 9 - 15**  
Changing the Font Size

*To change the font size, follow the following steps:*

1. Select the text you want to change the size of its font.
2. From the <Home page> tab and from the group <font> click on the <font size> icon arrow as in figure (9- 17)
3. Choose the appropriate size of the font and save the document.

Figure 9-17:  
Font Size



### 9- 4 -5 Change the FontType:

## Skill 9 - 16 Change the Font Type



**To change the font type, follow the following steps:**

1. Select the text you want to change the type of font.
2. From the <Home page> tab and from the group's <font> click on the icon arrow <Font type> as in figure(918-)
3. Choose the appropriate type of font and then save the document.

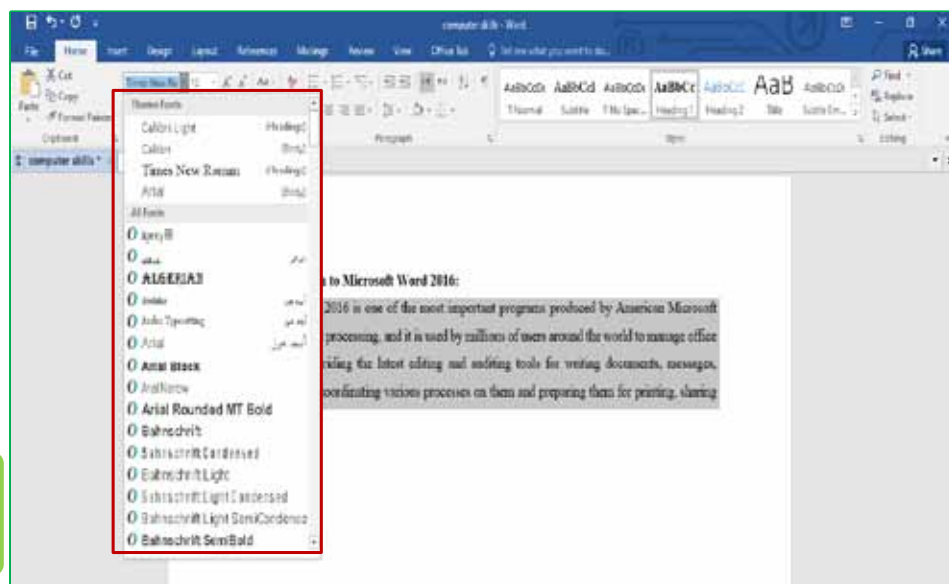


Figure 9-18:  
Font  
Types

### 9 -46- Change the Font Colour:

## Skill 9 - 17 Change the Font Color



**To change the colour of the font, follow the following steps:**

1. Select the text you want to change the colour of its font.
2. From the <Home page> tab and from the group <font> click on the <font Colour > icon arrow as in figure (919-)
3. Choose the suitable colour for the font and then save the document.

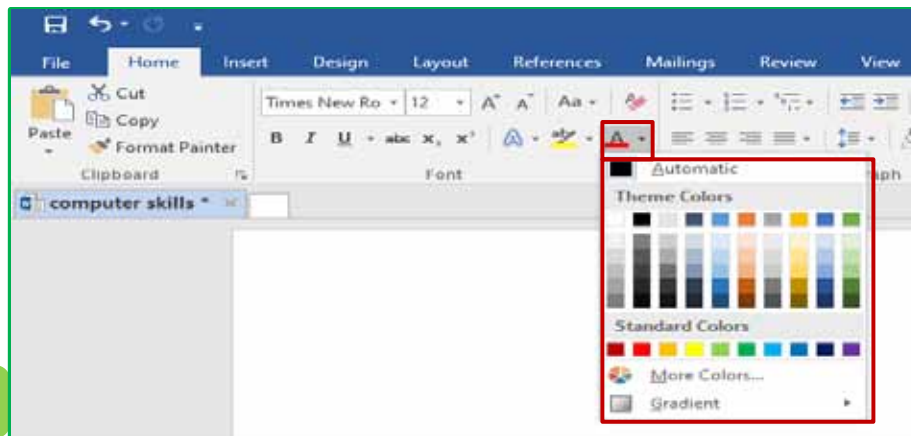


Figure 9-19:  
Font Colors

**9-4- 7 Text Highlight Colour:**

**Skill 9 - 18**  
Text Highlight Color

*In addition to the main font colours, you can also apply the highlight colour to the text. To apply a highlight colour to the text follows the following steps:*

1. Select the text on which you would like to add a colour to distinguish.
2. from the <Home page> tab and from the group's <font> click on the icon arrow <Text Highlight Colour> as the figure (9 -20)
3. Choose the suitable highlight colour for the text and then save the document.

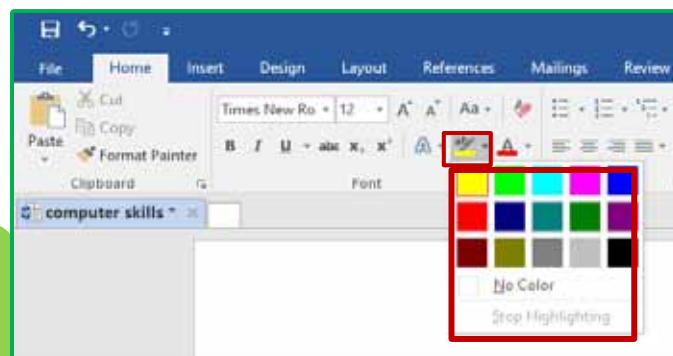


Figure 9-20:  
Text  
Highlight  
Color

**9-4- 8 Remove TextFormatting:**

**Skill 9 - 19**  
Remove text formatting

**To remove the text format, follow the following steps:**

1. Select the text from which you would like to remove the format.
2. from the <Home page> tab and from the <font> group click on the entire <remove Format> icon arrow as the figure (921-)
3. Save the document.

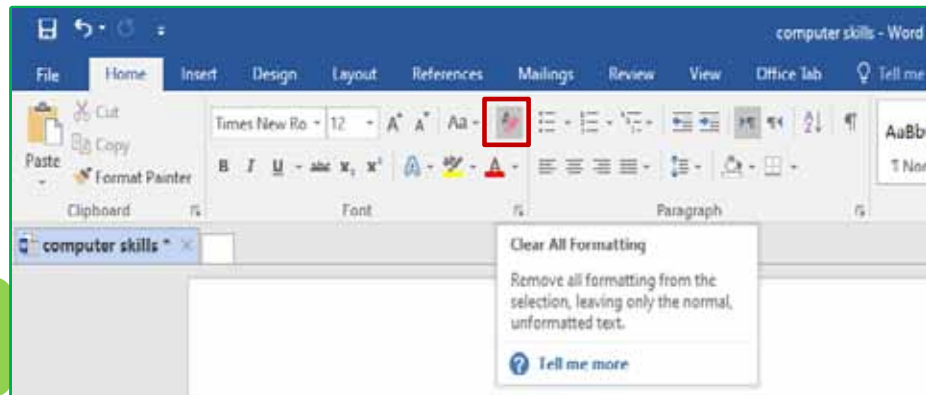



Figure 9-21:  
Clearing All  
Text Format

**9- 5 StyleProcess:**

**Skill 9 - 20**  
Using Ready made Style



The style is a set of formatting properties such as (font type, font size, font colour, line distance, alignment.... etc.) Styles are used to shorten time by applying many formatting properties at once.

**9- 5- 1 Using Existing Heading Style:**

**To apply ready-made letter style to a document follows the following steps:**

1. Open the document and then select the text on which you want to apply the letter style.
2. From the 'Home page' tab and from the group 'Styles', click on share more styles as in form (9- 22)
3. Click on the style you want and then save the document or keep it open.



Figure 9-22:  
Text Style  
Types and  
Options



**9 -5 - 2 Create a New Style:**

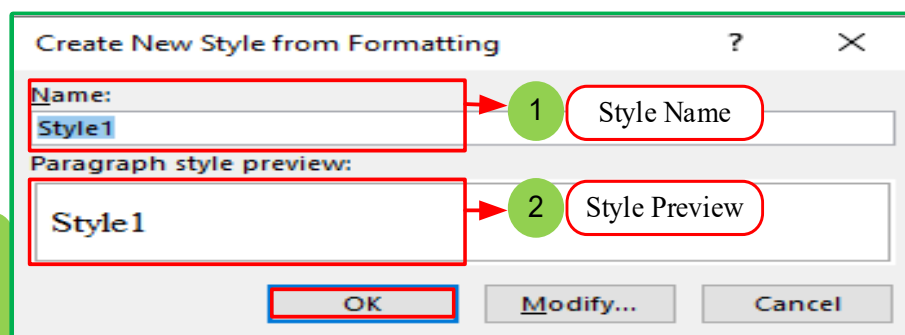
**Skill 9 - 21**

**Create a New Style**

**To create a new style follows the following steps:**

1. Open a document and then write a text in a specific style.
2. We select the text and then go to the 'Home page' tab go for the 'Styles' set click on 'Create a style'
3. A dialog box with options (style name and style preview) will appear as in figure (9- 23)
4. Click on OK to create style

Figure 9-23:  
Creating a  
New Style



### 9-5-4 Change Styles Properties:

**Skill 9 - 22**  
**Change Styles Properties**



**To change the properties of styles, follow the following steps:**

1. From the 'Home page' tab and from the 'Styles' group click on the style we want to change its properties with the right button of the mouse and choose 'edit' as the figure (9 -24)

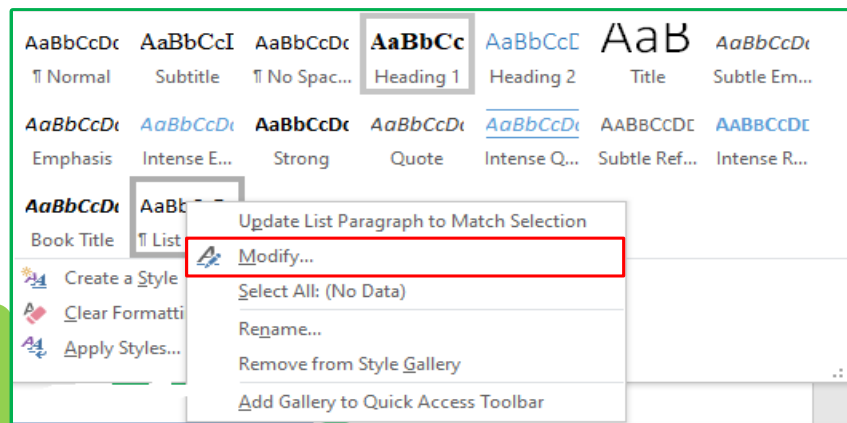


Figure 9-24:  
Modifying Existing Style

2. A dialogue box with a style adjustment will appear and has a range of options. Choose what suits you for adjustment as in figure (9- 25)

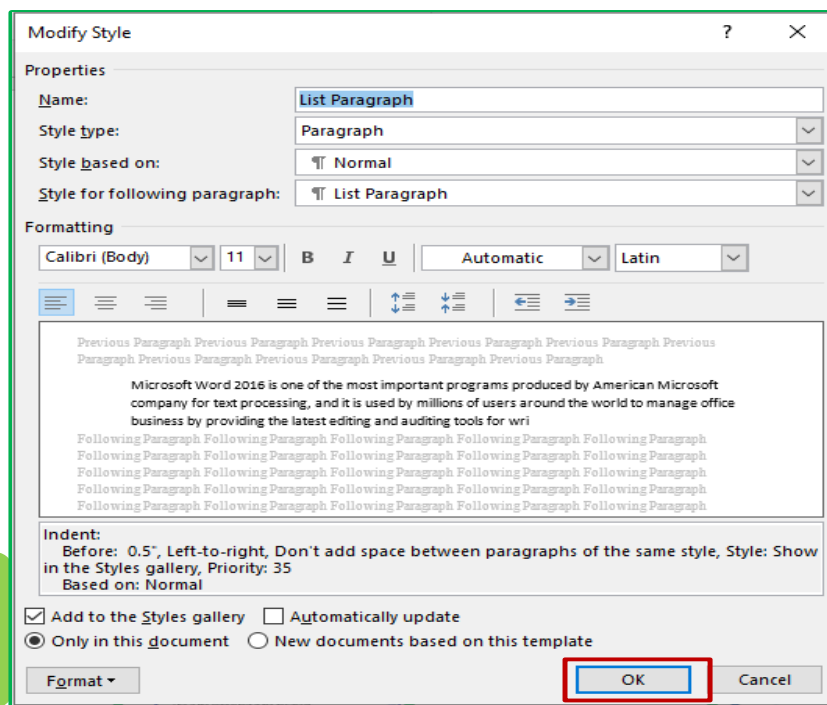


Figure 9-25:  
Modifying a Style Window

3. Click on 'OK' to change the style properties that have been selected

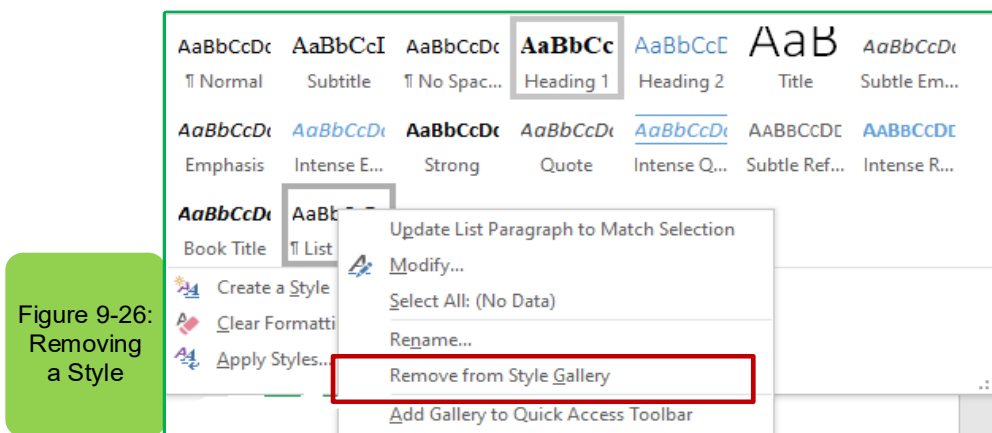
9- 5 -5 Delete a Style:

**Skill 9 - 23**  
Delete a Style



**To delete a style follow the following steps:**

1. Open the document from which you want to delete the style.
2. From the 'Home Page' tab and from the 'Styles' group, click on the style you would like to delete with the mouse right button and choose 'Remove from the style Gallery' as figure (9 -26)




9- 6 Document Management:

Word 2016 has some options that affect when applied to the entire page, including page direction and size, page margins, and other options.

9- 6 -1 Page Setup:

**Skill 9 - 24**  
Page Setup



**To setup the page Follow the following steps:**

1. Open the document you want to set up.
2. From the <Layout> tab and from the <Page Setting> tab click on one of the page setting options (adjust the margins, change direction, choose page size, add and remove columns, insert page breaks, show line numbers, change hyphen) as in figure (9- 27)
3. Click the <Save> button for the document to save the previous settings.



Figure 9-27:  
Page Setup

### 9 -6- 2 Insert Header and Footer:

**Skill 9 - 25**  
**Insert Header and Footer**



The header and footer of the page are the upper and lower parts of the margins of each page in the document where the data you want is written automatically at the top or bottom of the page in all pages of the document.

**To insert the header, footer, and page number follow the following steps:**

1. Open the document on which you would like to insert a header and footer to the page.
2. From the 'Insert' tab go to 'Header or footer' as form (9- 28)



Figure 9-28:  
Insert Page  
Header and  
Footer

3. Click on the header and the header dialog will appear as in figure (9- 29)

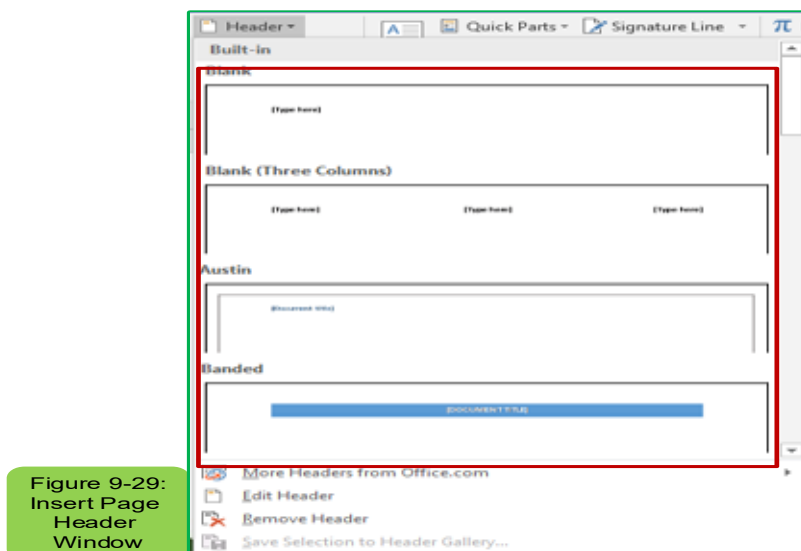


Figure 9-29:  
Insert Page  
Header  
Window

4. Choose from the header dialog box the appropriate type of page header that you want to add.

5. It will be automatically inserted into the document
6. The same steps can be followed to insert the page footer by clicking on the 'footer' option for the document as in figure (9- 30)

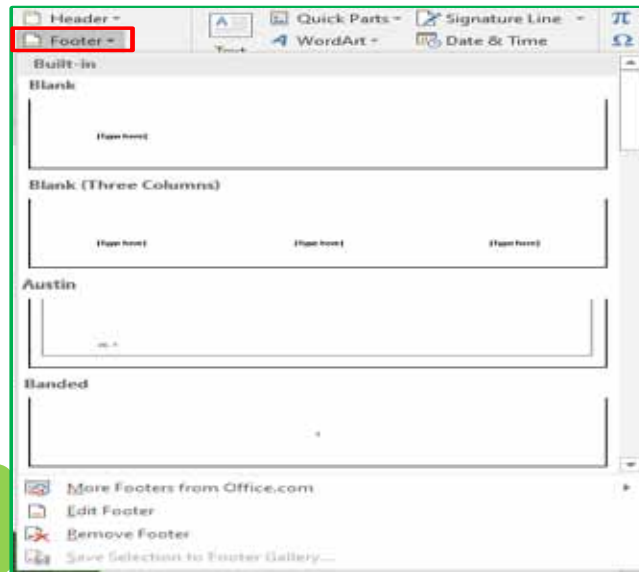


Figure 9-30:  
Insert Page  
Footer  
Window

**9 -6- 3 Edit the Header and Footer:**

**Skill 9 - 26**

**Edit the Header and Footer**



**To edit the header or footer of the page, follow the following steps:**

1. Double-click inside the <header/footer> area.
2. The <design> will appear from which to go to the <header and footer> set to edit the header and footer, for example if we want to change the date we will click on it and make the necessary adjustments See Figure (9 -31)

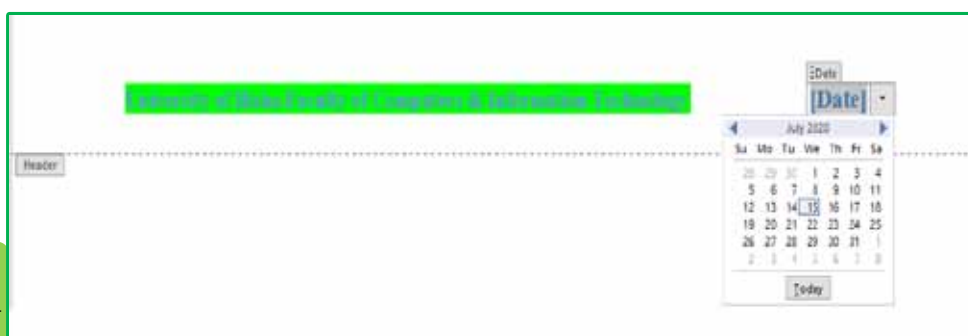


Figure 9-31:  
Editing the  
Page Header

3. Close this tab or double-click anywhere in the main part of the document.
4. Back to the normal editing view.

**9 -6- 4 Inserts Pages Numbers:**

**Skill 9 - 27**  
**Inserts Pages Numbers**



Page numbers are treated as a header and footer to the page because they are at the top of the page or at the bottom. Page numbers are formatted like any other text.

**To insert page numbers follow the following steps:**

1. From the <Insert> tab and from the <header and footer> group click on the add page numbers
2. Options will appear to insert the number at the front of the page or at the bottom of the page as in figure (9 -32)
3. Choose one of the appropriate formats to insert the page numbers of your document
4. Click on the page number command that will cause the numbering to appear on the page

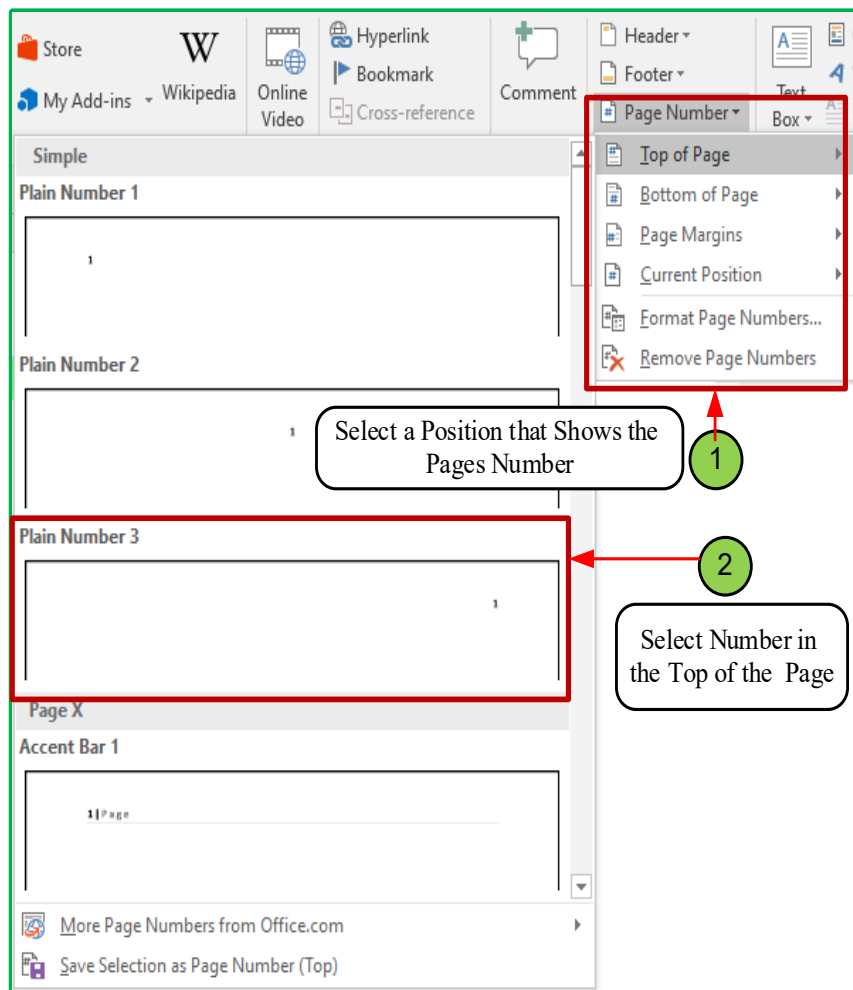



Figure 9-32:  
Insert  
Pages  
Number

**9- 6- 5 Delete Page Number:**

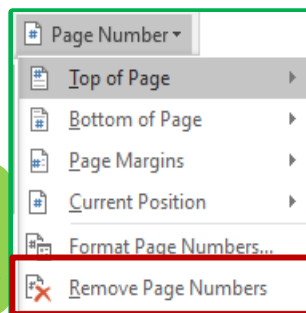
**Skill 9 - 28**  
Delete Page Number



**To delete page numbers, follow the following steps:**

1. From the <Insert> tab and from the <header and footer> group click on the page number arrow
2. Options will appear, Click option on the <Delete Page Numbers> as in figure (9- 33 )

Figure 9-33:  
Removing  
Page Numbers



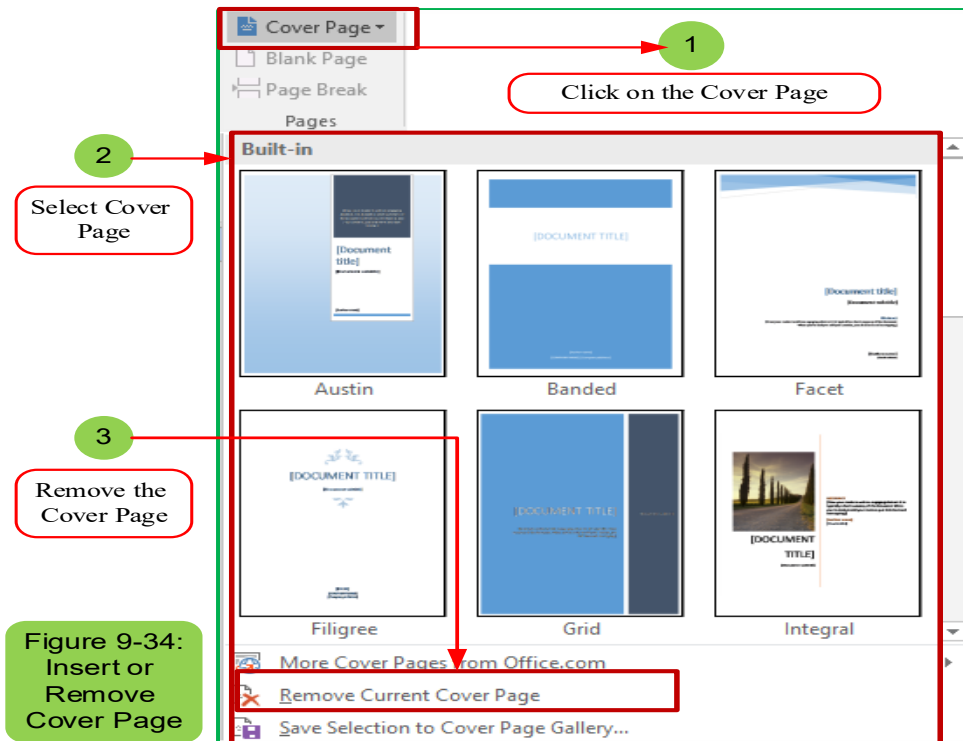
**96-6- Add and Delete a Cover Page:**

**Skill 9 - 29**  
Add and Delete a Cover Page



**To add a cover page, follow the following steps:**

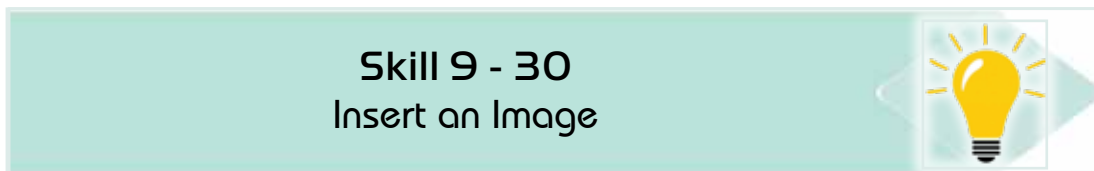
1. From the 'Insert' tab and from the group 'pages, choose 'cover page'
2. Click on the cover page you want and this page will be included and you will be able to edit the typical text in your text.
3. To delete the cover page click 'Delete the cover page' see Figure (9 -34)



## 9 -7 Insert Images, Drawings, Tables, Shapes, Symbols and Equations:

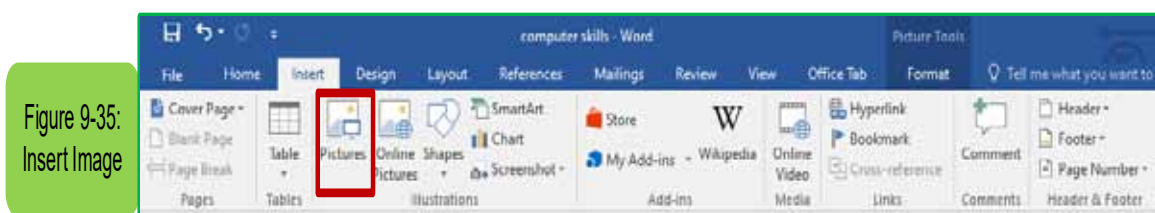
### 9.7.1 Insert and Format Images:

#### •Insert an Image:



#### To insert a picture follow the following steps:

1. From the 'Insert' tab and from the 'Illustrations' collection click on the 'Photos' icon as in figure (935-)



2. The 'Insert Image' window will appear
3. Select the track of the image on the computer
4. Choose the image you would like to insert by clicking on it with the left mouse button once



- Click on insert or click on the left mouse button double click in a row, the image will be inserted into the document see Figure (9- 36)

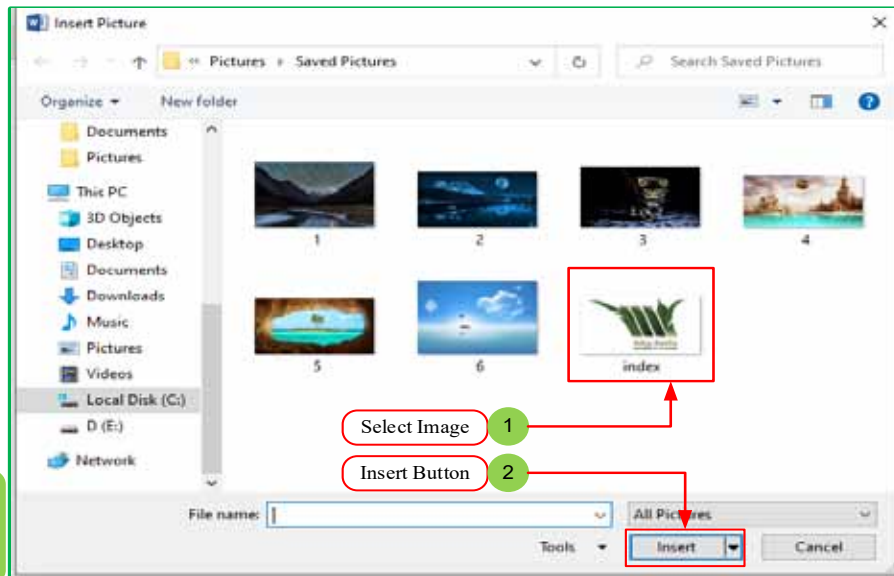


Figure 9-36:  
Insert Image  
Window

● **Image Resize:**

**Skill 9 - 31**  
**Image Resize**

*To resize the image follow the following steps:*

- Select the image to be resized by clicking on it with the left mouse button
- Circles will appear on the borders of the image
- Drag these circles out with the mouse to enlarge or to minimize the size of the image see figure (9- 37)



Figure 9-37:  
Changing  
Image Size

- **Image Format:**

**Skill 9 - 32**  
**Image Format**



**To format the image follow the following steps:**

1. Select the image to change its format by clicking on it with the left mouse button
2. A new tab will appear under the name 'Format'
3. Choose the appropriate tools to format the image see figure (938-)



Figure 9-38:  
Image  
Formatting

**The commands in the format tab allow:**

1. Remove the background: to control the parts of the image
2. Corrections: to improve image brightness and contrast
3. Colour: to change colour
4. Artistic Effects: To add effects on the image
5. Image compression: to reduce image size
6. Changing the image: change to another image
7. Reset image: to ignore all formatting changes

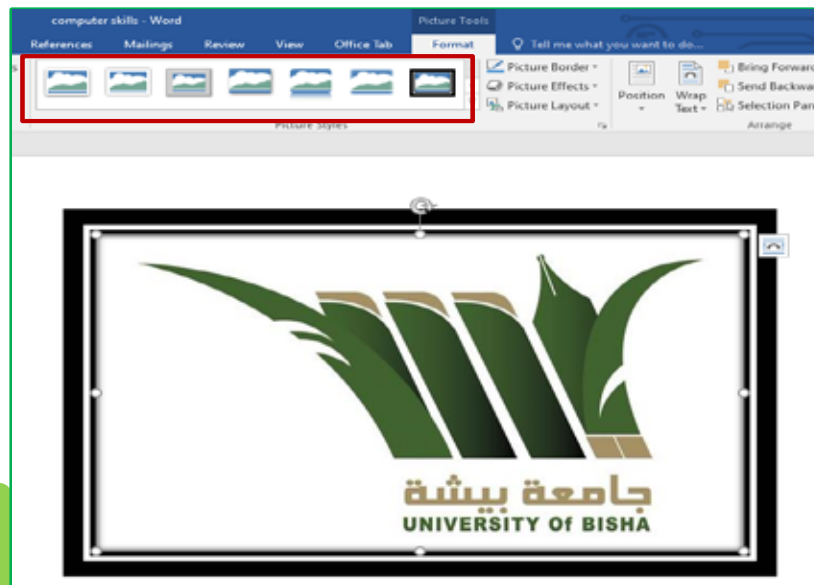



Figure 9-38:  
Image  
Formatting

● **Insert Pictures from the Internet:**

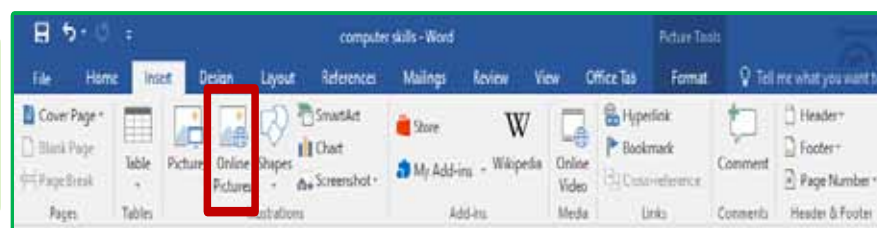
**Skill 9 - 33**  
Insert Pictures from the Internet



*To insert a picture from the Internet follow the following steps:*

1. Place the mouse indicator where you want to insert the image
2. From the 'Insert' tab and from the group 'Illustrations', click the left mouse button on the icon 'Online Photos' as in figure (939-), and an Internet connection must be available.

Figure 9-39:  
Insert  
Pictures from  
the Internet



3. The 'Picture Insert' screen will appear, type the name of the image or clip what you want to search for
4. Search results will appear from them choose the desired image and then click on the 'Insert' button and the image will appear where it was pre-set in step 1

**9-7-2 Insert and Delete Shapes:**

**Skill 9 - 34**  
**Insert Shapes**



**To insert and delete shapes follow the following steps:**

1. From the 'Insert' tab click the left mouse button on 'shapes' as in figure (9- 40)

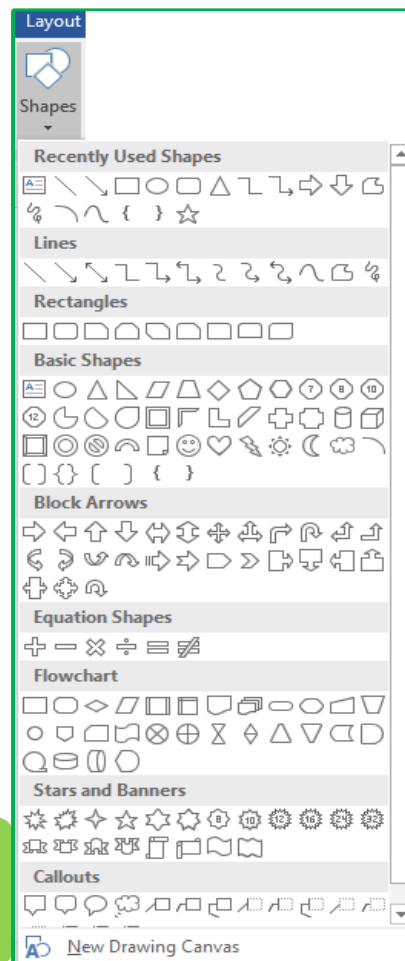


Figure 9-40:  
Insert  
Shapes

2. Select the required shape from the set of shapes by clicking on it with the left mouse button
3. Select what you want to insert the shape and then continuously click the left mouse button to start the insertion process with the indicator pulled in the desired direction as in figure (9- 41)
4. Control the shape resize in the same way you used to change the size of the image above.

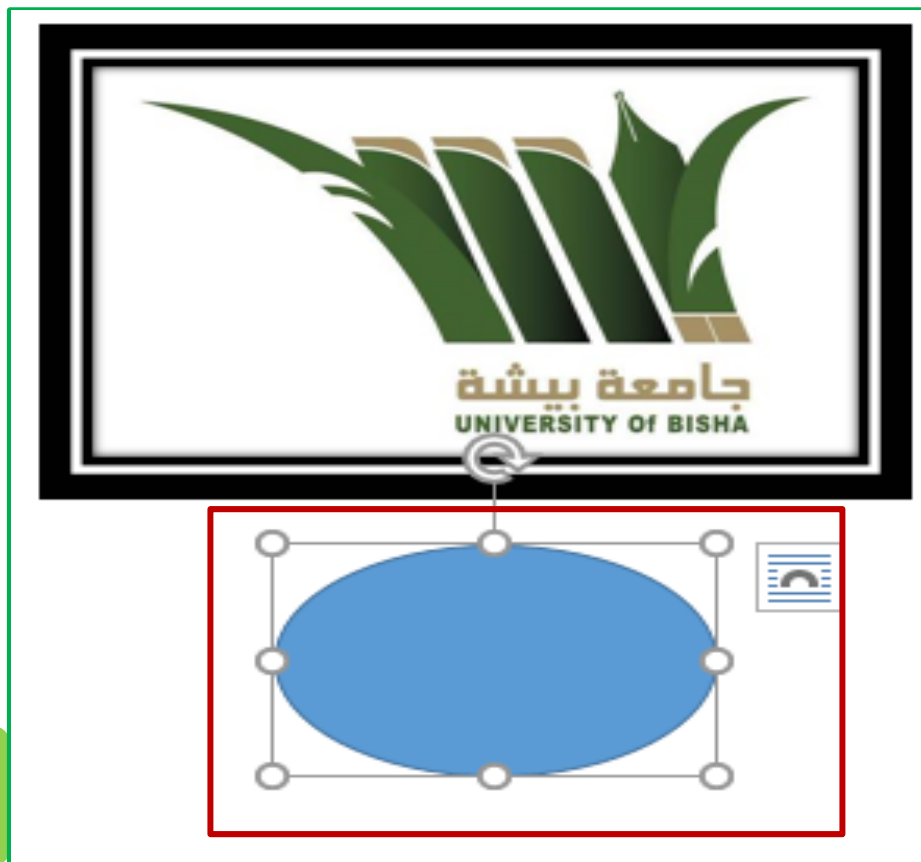


Figure 9-41:  
Changing  
Shape Size

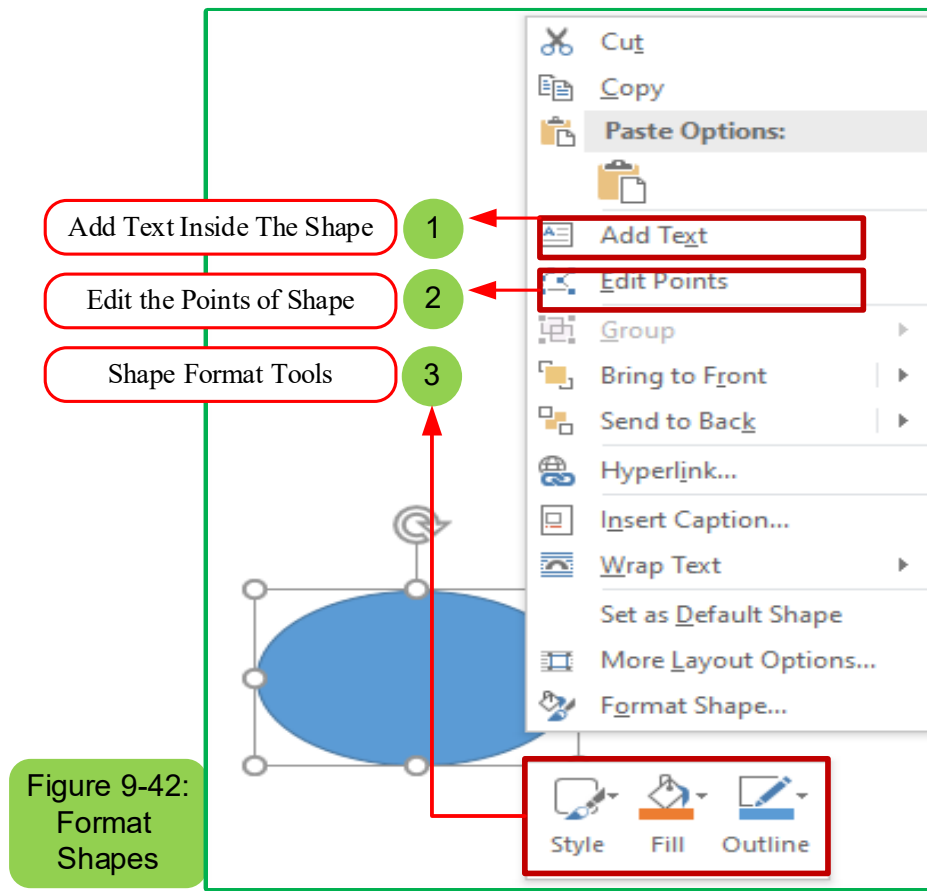
• **Format Shapes:**

**Skill 9 - 35**  
Format Shapes



*To format shapes, follow the following steps:*

1. Select the shape to be formatted by clicking on the left mouse button
2. A new tab will appear as 'Format' click on it and then select the appropriate tools to format the shape such as:
  - Shape style
  - Fill the shape
  - Outline of the shape
  - Effects of shapes
3. To add text inside the shape click the right mouse button on the shape and then click 'Edit the dots' to add text or to edit text points click see Figure (9 -42)



- **Insert Video from Internet:**

**Skill 9 - 36**  
Insert Video from Internet



**To insert a video from the Internet follow the following steps:**

1. Place the mouse indicator where you want to insert the video
2. From the 'Insert' click on the 'Online Video' icon
3. The video insert window will appear, write the name of the video you are looking for and you want to upload it within the document, for example we would like to search for a video in the name of the prophet's biography from YouTube
4. Search results will show the desired video and click on the 'Insert' button see Figure (9 -43)

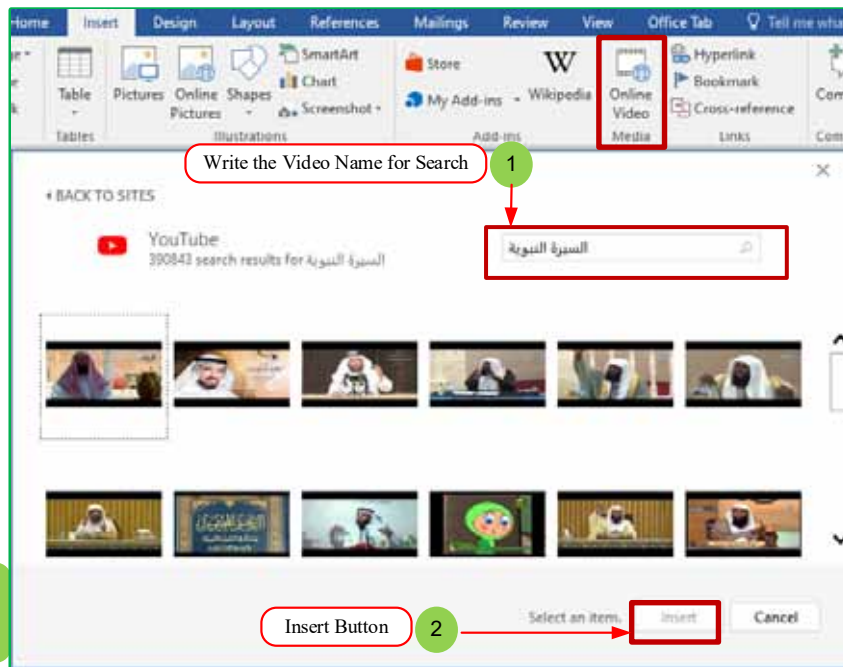


Figure 9-43:  
Insert Video  
Wondow

### 9 -7 -3 Insert and Use Word Art and Smart Art:

- **Insert Word Art:**

## Skill 9 - 37

### Insert Word Art

Uses Word Art to add document-specific text effects

**To insert a Word Art font, follow the following steps:**

1. Place the mouse pointer on the text you want to add the Word Art effect.
2. From the 'Insert' tab click left mouse button on Word Art
3. Word Art options appear as in figure (9- 44)

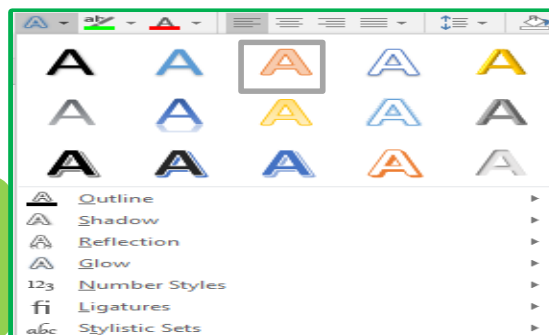


Figure 9-44:  
Inserting a  
Word Art  
Text

4. Choose the effects of Word Art and the effect will appear on the text see Figure (9 -45)

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Faculty of Computers & Information Technology

Figure 9-45:  
Word Art  
Text Effect

5. Word Art style can be chosen first and then we write the text and the Word Art effect will appear on the entered text

- **Insert Smart Art:**

**Skill 9 - 38**  
Insert Smart Art



*To insert the Smart Art chart, follow the following steps:*

1. Place the mouse indicator on the text you want to add the Smart Art effect
2. From the 'Insert' tab, click the left mouse button on 'SmartArt'
3. Smart Art Graphic Options screen will appear
4. 4. Choose the Smart Art drawing that is appropriate for you and then click 'OK' see Figure (946-)

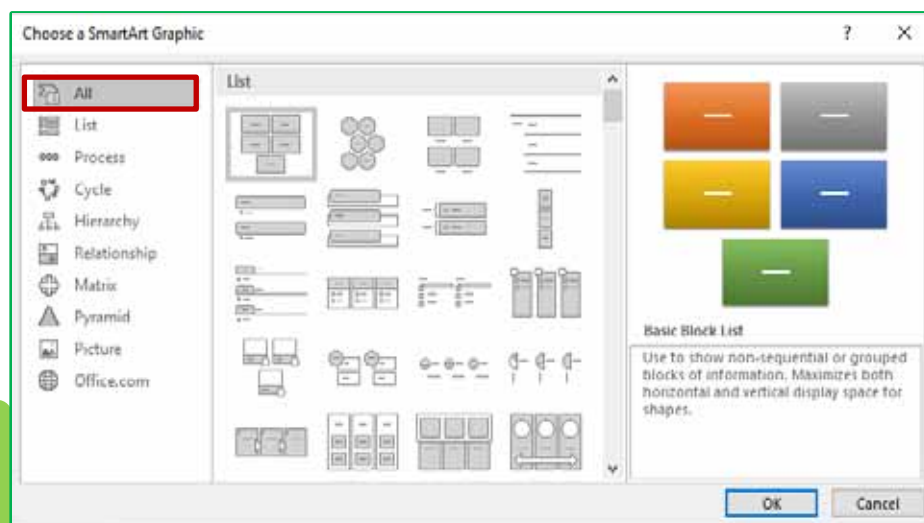


Figure 9-46:  
Insert Smart  
Art Shape  
Options



9- 7 -4 Inserts a Chart:

**Skill 9 - 39**  
Insert a Chart



Word 2016 adopts new types of charts that help display data in ways that the user can understand and compare, the most important of which are (vertical, tape, linear, circular)

**To insert a chart follow the following steps:**


1. Place the mouse indicator in the text that you want to insert a chart on it
2. From the 'Insert' tab and from the 'Illustrations' collection, choose a 'chart' icon
3. The dialogue box will appear (insert 'chart')
4. Click with the left mouse button in the shape of the chart you want to insert and then click on 'OK' see Figure (9- 47)



Figure 9-47:  
Inserting  
Chart

**9-7-5 Insert and Format Tables:**  
**9.7.5.1 Table Insertion:**

**Skill 9 - 40**  
**Table Insertion**



Tables are a good way to organize information with documents, and Word2016 allows you to add a table within the document and format it as necessary. To insert a table within the document follow the following steps:

1. Place the mouse indicator where you want to insert a table
2. From the <Insert> tab click the table option, drag the table dimensions on the grid and click the left mouse button see figure (948-)

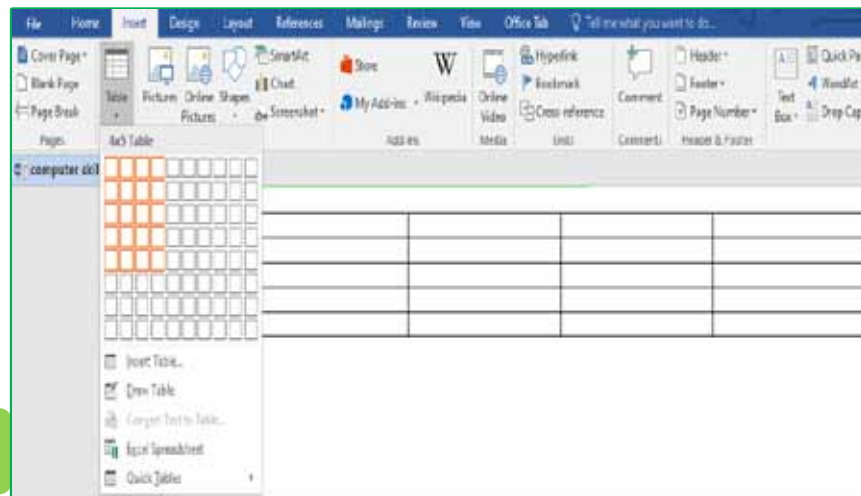
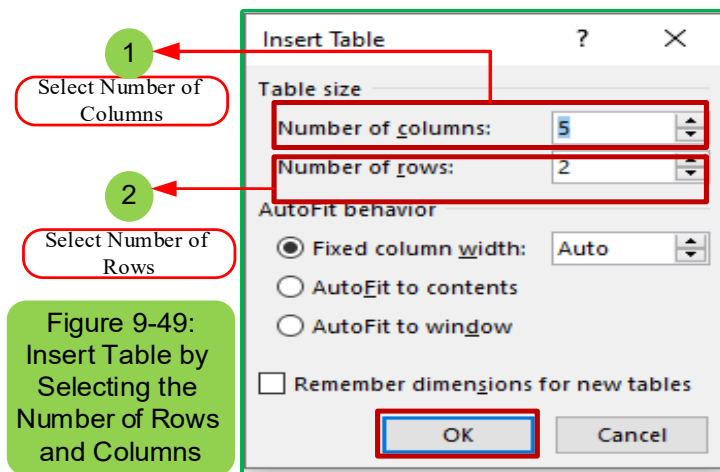


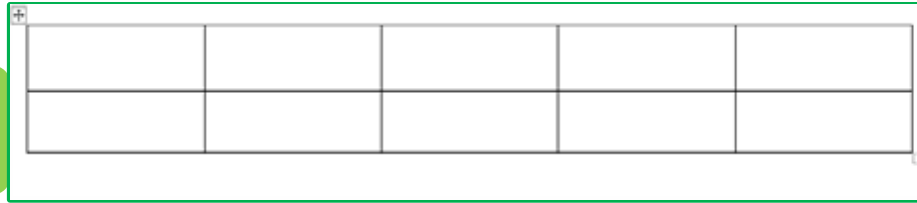
Figure 9-48:  
Insert Table

3. Or a table can be also inserted in a 'table insert' way
4. The 'Insert Table' dialog will appear and select the required columns and rows in the table see Figure 9- 49.



- Click on the 'OK' button, the table will appear in the document as the figure (9- 50)


Figure 9-50:  
Table  
Inserted



● **92-5-7- Table Format:**

**Skill 9 - 41**

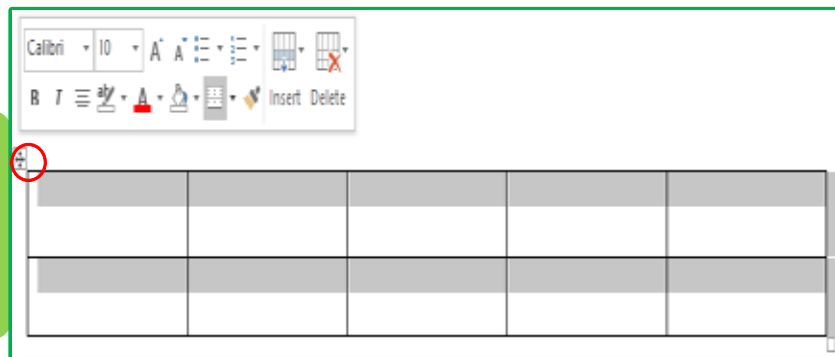
**Table Format**



You must select the cells you want to format, and to select table cells, follow the following steps:

- Place the mouse indicator over any part of the table and click the four-headed arrow icon over the upper corner of the table as in figure (9- 51)

Figure 9-51:  
Table  
Prosperities  
using the  
Headed  
Arrow



- From the 'Home page' tab choose font type, size, colour, cell fill colour, text alignment (right, left, centre)
- Control the height of the rows and the width of the columns by pulling the mouse button.
- The previously selected format will be applied to the schedule.

**93-5-7-Use Automatic Formattingfor the Table:**

**To use the automatic formatting to the table, follow the following steps:**

1. Select the table in the box by clicking on the four-headed arrow icon above the upper corner from the right of the table

2. from the <Design> tab go to the <Normal Table> option and the format window appears as figure (952-) and from which to choose the appropriate format.

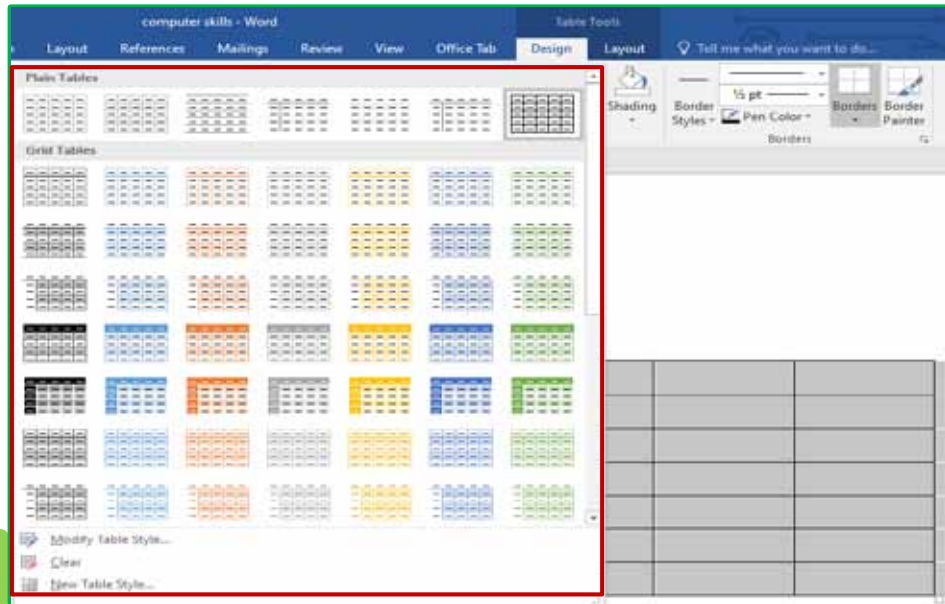


Figure 9-52:  
Table Format

3. Once you have chosen a format you will notice it applied to the table

#### **9-7-5-4 Inserts Rows and Colum in the Table:**

### Skill 9 - 42 Inserts Rows and Colum in the Table



**To insert rows and Colum to the table, follow the following steps:**

1. Select the row you want to insert above, bottom, right, or left of it
2. Place the writing indicator in any cell of the row
3. Go to the 'Layout' tab and from the 'Rows and Columns' group click the icon 'Insert' with insert options (up to the bottom right left) as in figure (9- 53)

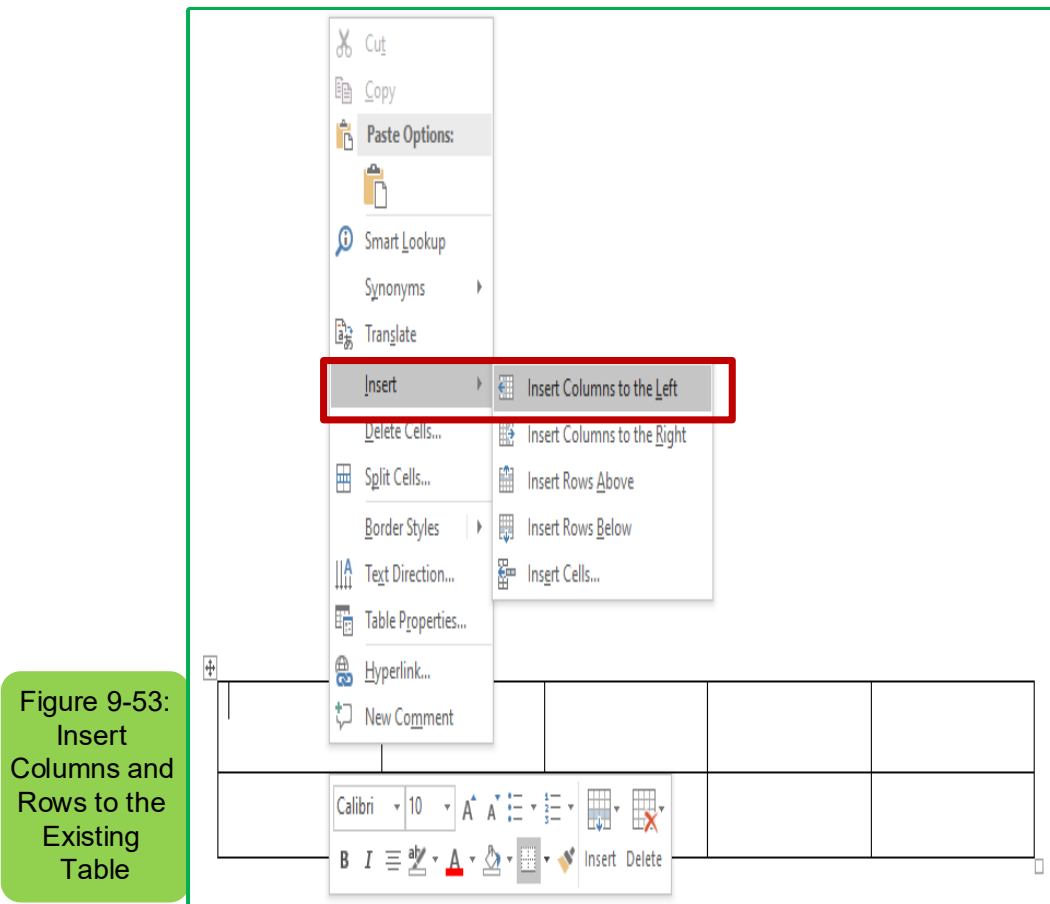



Figure 9-53:  
Insert  
Columns and  
Rows to the  
Existing  
Table

• 9 -7 -5 -5 Add Borders and Shading to the Table:

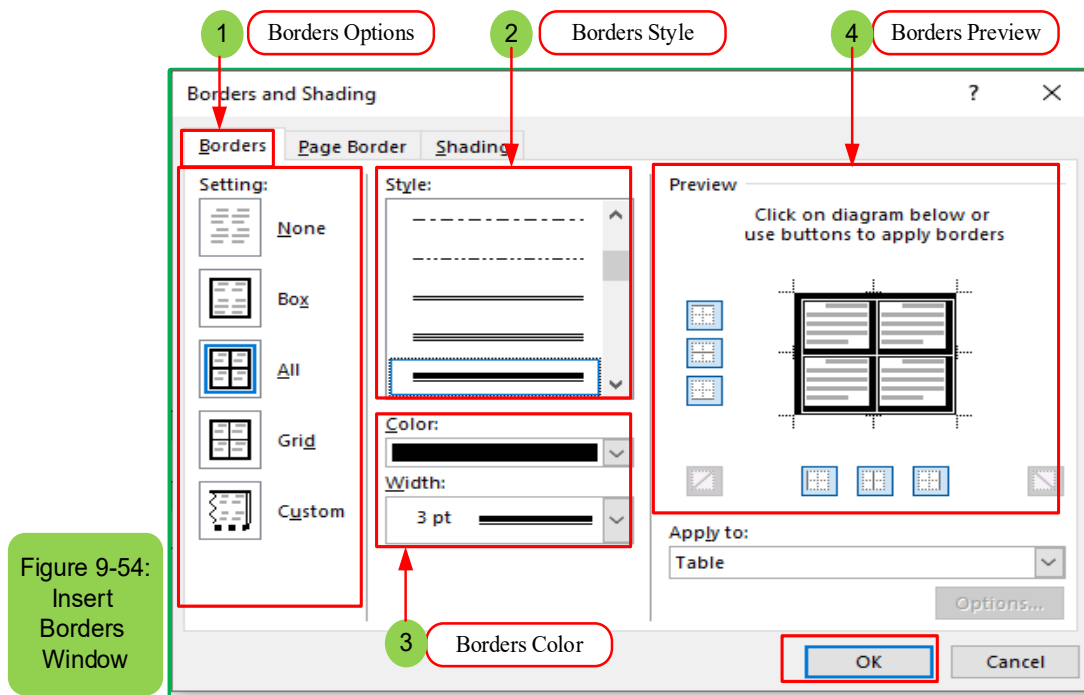
**Skill 9 - 43**  
Add Borders and Shading to the Table



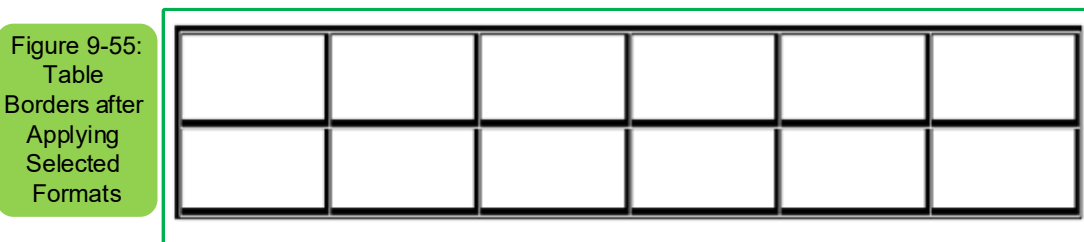
**To add borders and shading to the table, follow the following steps:**

1. Place the mouse pointer in any of the table cells
2. From <Design> select Page borders tab
3. The <Borders and Shading> window will show which choose <borders>
4. Choose the border shape of border options from the right of the border window and shading (without, surround, all, grid, custom)
5. Choose the style or shape of the border from the centre of the border window and shading
6. Choose the colour of the border from the centre of the border window and shading

- Choose the width of the border from the centre of the border window and shading and you will notice the preview to the left of the border window and shading see figure (9- 54)



- Click 'OK' at the bottom of the border and shading window and the table will appear with the borders and specifications chosen see Figure (9- 55)



### 9-7-5-6 Add Shading to the Table:

**To add shading to the table follow the following steps:**

- Click on the <Shading> tab from the border window and shading
- Choose the shade colour you want
- Choose the shade style from the bottom of the border window and shading.
- Click OK at the bottom of the border window and shading see figure (956-)

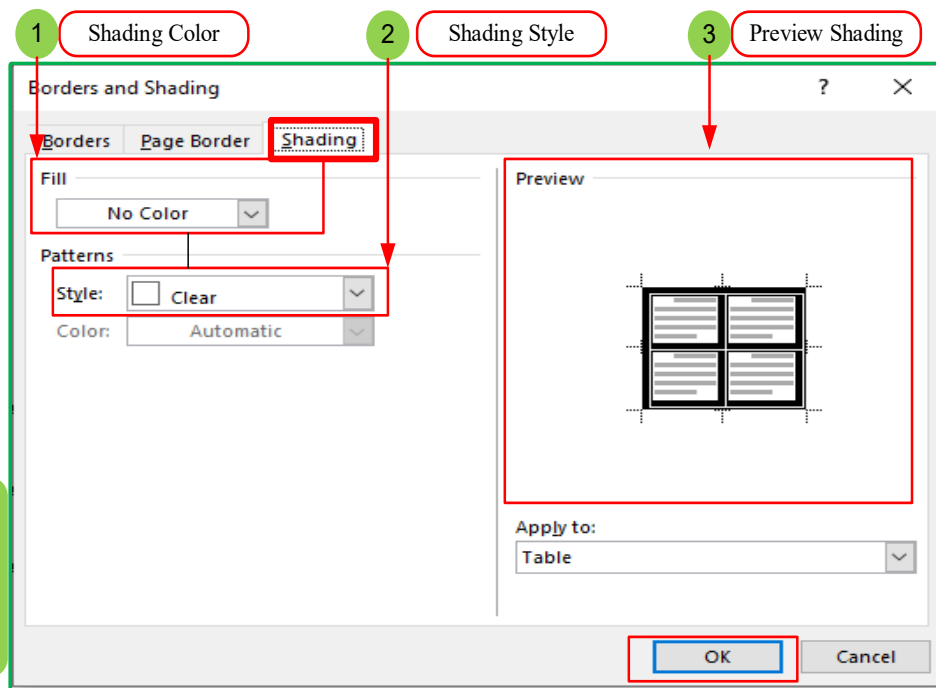


Figure 9-56:  
Insert  
Shading  
Window

5. The table will appear directly in selected formats as in figure (9 -57)

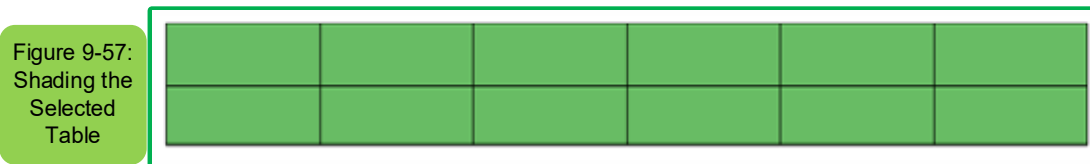


Figure 9-57:  
Shading the  
Selected  
Table

**9 -7- 6 Inserting Symbols and Equations:**

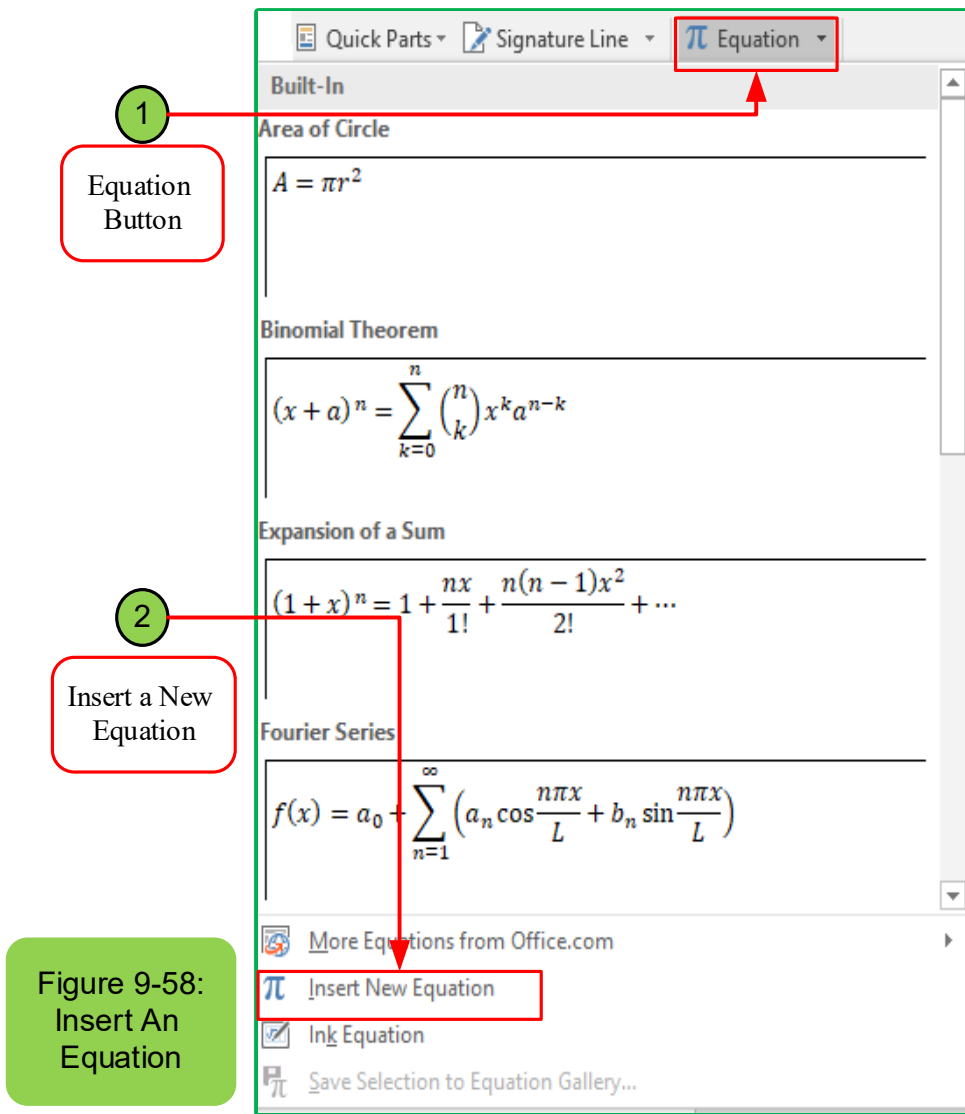
Word 2016 allows you to insert mathematical symbols in the form of equations or texts using equation tools

**9- 7- 9- 1 InsertsEquation:**

**Skill 9 - 44**  
Inserts Equation


**To insert an equation, follow the following steps:**

1. Place the indicator where you want to insert the equation
2. From the Insert tab and from the 'symbols' group click the arrow in the equation,
3. Click 'Insert a new equation' see Figure (958-)



**9-7-6-2 Insert Symbol:**

**Skill 9 - 45**  
**Insert Symbol**

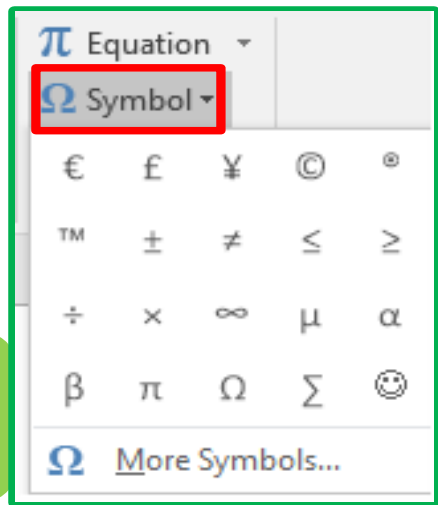


**To insert a symbol, follow the following steps:**

1. Place the cursor where you want to insert the symbol
2. In the 'Insert' tab click on 'symbol' as in figure (959-)

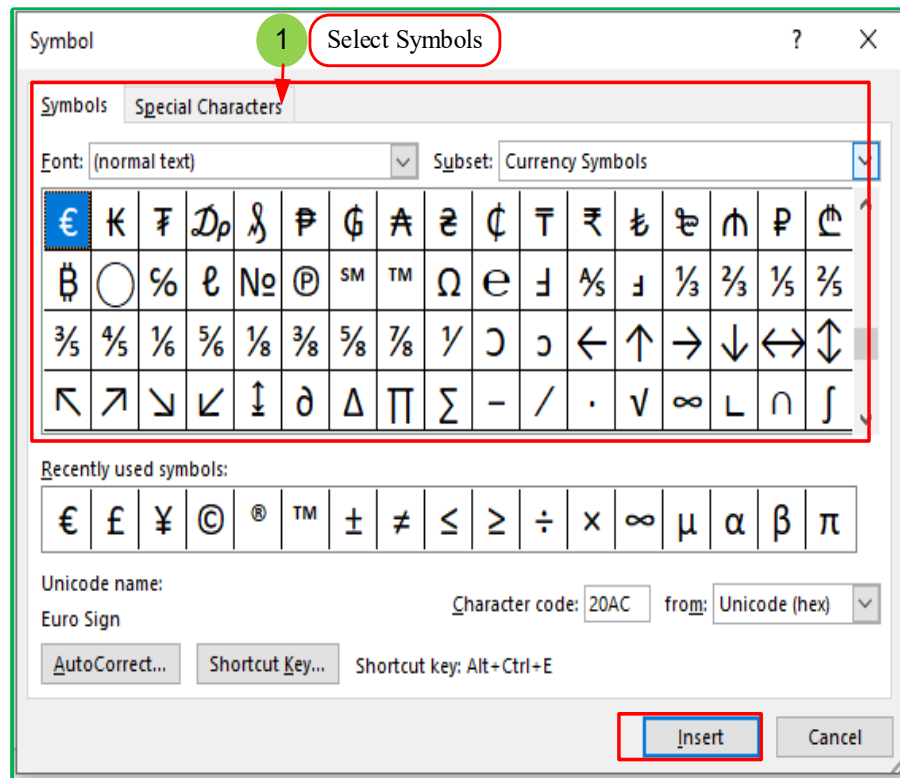


Figure 9-59:  
Inserting  
Symbols



3. Click 'More symbols' to show the rest of the symbols when you find the symbol you want, click on 'Insert' or double-click the left mouse button above it and it will be inserted directly into the document See Figure (9- 60)

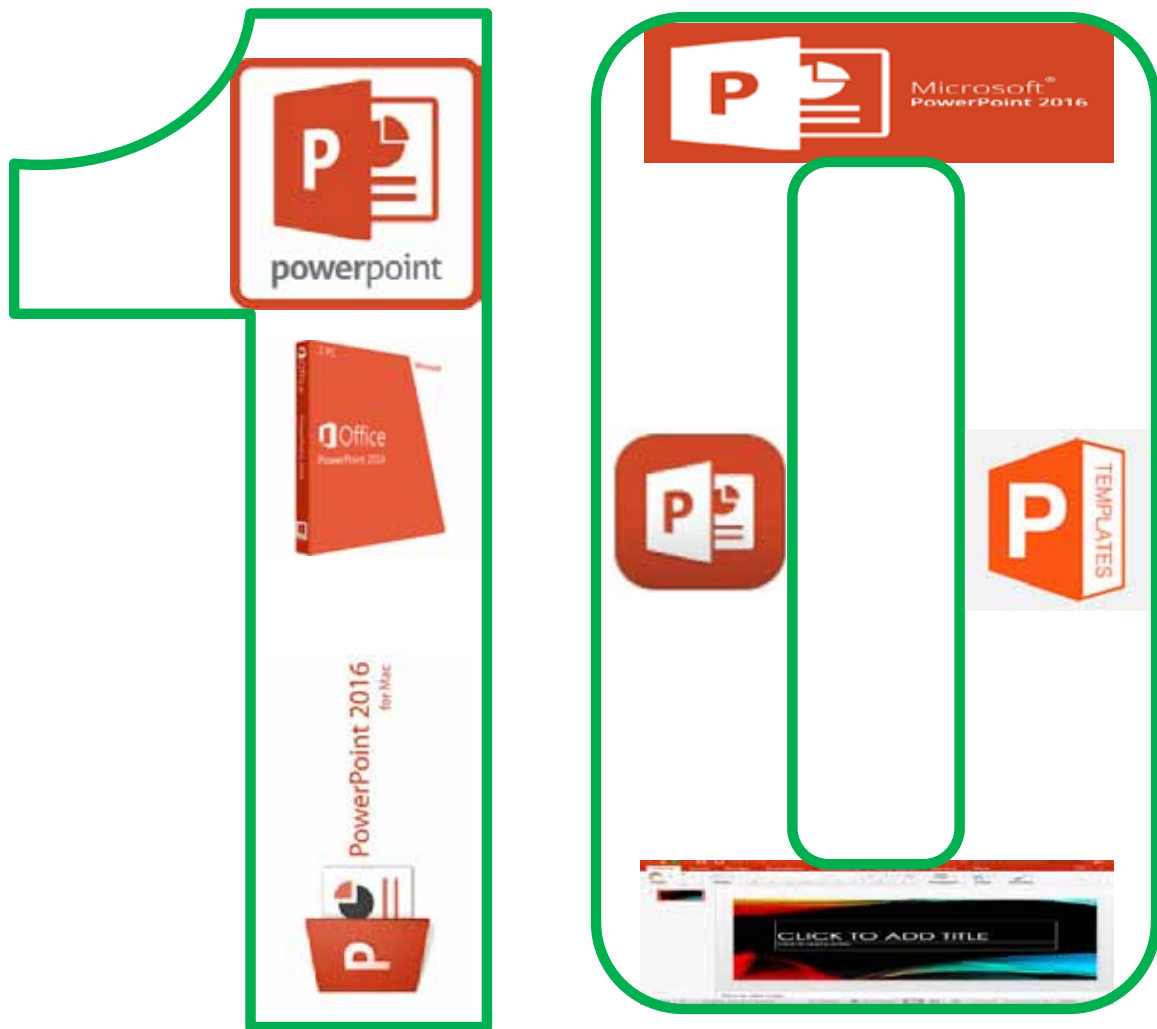
Figure 9-60:  
Additional  
Symbols  
Window



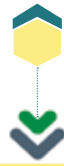


# Chapter 10

## Microsoft PowerPoint







## Microsoft PowerPoint

### Objectives

#### ➔ Main objectives:

1. The ability to create and edit slides.
2. The ability to insert and modify simple and large graphics.
3. Add sounds and animations to the slides.

#### ➔ Secondary objectives

After studying this chapter, the student is expected to master the following knowledge and skills:

1. Master the running and closing of PowerPoint program.
2. Learn how to open and close a presentation
3. Adds and deletes a slide.
4. Learn about changing slides within presentations.
5. Learn to add objects on a slide.
6. Learn to add and edit slides wallpapers.
7. Arrange and edit slides.
8. Learn to draw and insert shapes and graphs on slides.
9. Learn to add photos, sounds, and video to the slide.



## 10 -1 Introduction

In this chapter, we will review number of skills that student can be able to learn by using Microsoft PowerPoint 2016 or what is known as the PowerPoint Program. All these skills are only related to Microsoft PowerPoint 2016 so that we avoid repetition:

- What is Microsoft PowerPoint?
- New features in the PowerPoint program.
- The ability to deal with the interface of the power point program through which you can create, open, or close the program.
- Dealing with the power point program using slides or layout.
- How to create a presentation and the ability to add, edit or delete slides.
- Use parts that enable us to insert content into slides.
- Changing slides of the presentation.
- Choose and reset the layout of the slide.
- The ability to open, close and save files.
- The ability to obtain commands in the program of presentations through the command and instructions screen.

## 10- 2 Features included in the new version of Office 2016

- The new version provides us with the ability to share in writing and edit the file at the same time, which is one of the advantages of working on the same file at the same time with colleagues, so colleagues can edit the same file if it is saved in SharePoint at the same time, which is advantage enables group writing and the ability to participate in document output.
- The ability to send files of large sizes using cloud storage (OneDrive), which is an important feature that enables the user to save huge files in the cloud storage service by sending Url of the file using (Outlook) as well as modifying the files inside the storage location.
- Recovering files that were indeliberately deleted, and this file is saved in SharePoint or OneDrive Here deleted files can be recovered by going back to previous versions of Office.
- The smart search and replace feature, which is one of the most wonderful features of Office 2016. Through this feature, a specific word can be located inside the document by right-click to search for the word through the Bing search engine. This feature is useful in facilitating the editing and addition process as it also helps to replace written words with another.

- We find that there is the Groups feature in Outlook and it is a new feature that was added in the new version of Office. Now it is possible to create new lists include friends and colleagues with customizing for each group an incoming and sent email as well as calendar and OneNote.
- A new set of graphs, longitudinal and horizontal squares has been added in the new version, which is more flexible and sophisticated than previous versions that were difficult to use.
- The possibility of predicting the probable results and this feature is called a predictive text, which is a possibility was included in the charts in Excel, characterized by the speed of predicting the results and extracting the predictions by just pressing the mouse button, and it was designed specifically for employers to give reliable calculated results.
- Using Skype, which is an important feature for businessmen, as it enables them to use Skype within Word or Excel, now, video calls or messages can be answered without leaving the document that is being worked on.
- Finally, Office 2016 is interconnected with all systems. It is compatible with the Windows and Mac operating systems as well as with Android and OS.

### 10- 3 PowerPoint Program

The powerpoint Program or what is known as the Microsoft Power Point is considered one of the programs available at Microsoft Office and Power Point is specialized in creating presentations, as it provides many features that make the process of creating and presenting presentations easy. Microsoft PowerPoint 2016 is the version number fifteen for Microsoft. It is considered one of the effective programs in presentations (interactive presentations), whereby it is possible to create slides that appear sequentially, automatically, or interactively, with the addition of animations and sound effects accompanying the animation. The power point program enables its user to:

- Share files with others.
- Store file with PowerPoint format that is modifiable, or an automatic presentation that can be played without a PowerPoint program on the computer or in form of video.
- easy handling of charts and faster.

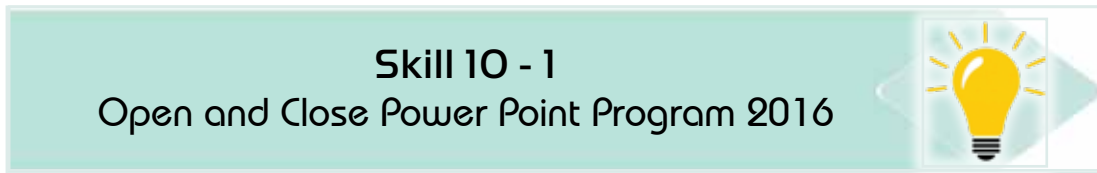
#### 10 -3- 1 Fundamentals of design using PowerPoint

**PowerPoint depends in its use on the fundamentals of which you must:**

- The user should focus on coordination with the required form.

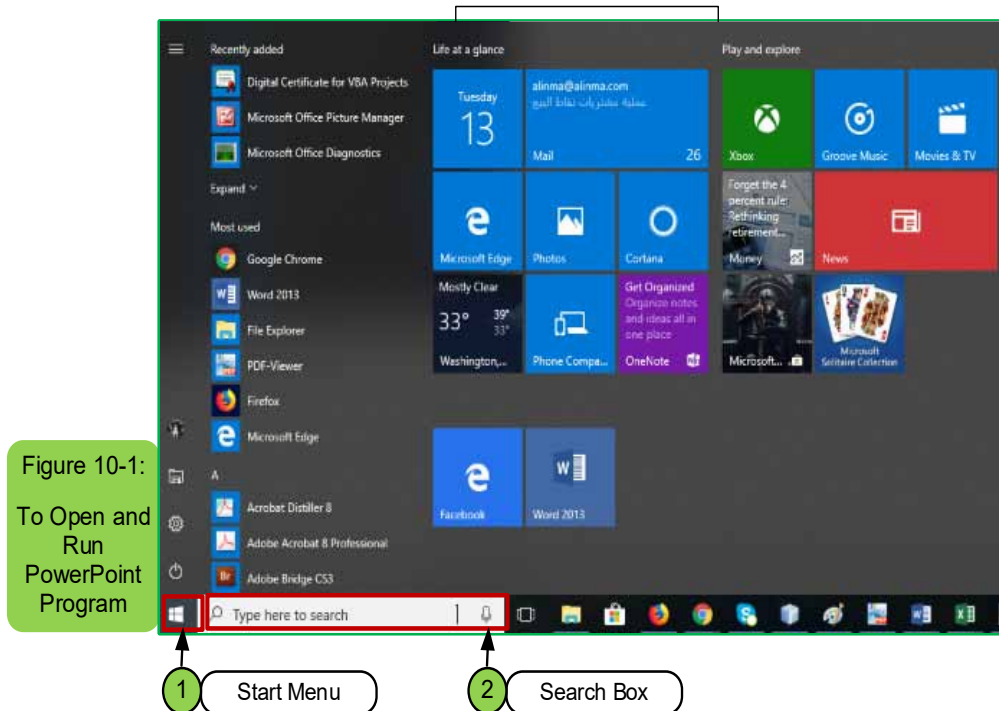
- The user should focus on using small sentences.
- The subtitles are distinguished by different colors and fonts, focusing on not using multiple fonts in one display, and focusing on using colors according to the degree of event and excitement.

## 10 -3- 2 Open and Close Power Point Program 2016



*To open and operate the PowerPoint program, there are several methods that can be used, such as:*

1. From the Start menu in Windows 10, click the left mouse button on the Windows icon, as shown in Figure 10 -1.
  - Then move to all programs.
  - Then enter the application programs and search for the PowerPoint 2016 program
2. Or directly, type in the search box as in Figure 101- Microsoft PowerPoint and then click the mouse button to open the PowerPoint program.





- Or from the desktop, by pressing the right mouse button on a place free of the desktop, then selecting New, then Microsoft PowerPoint presentation.

After entering Microsoft PowerPoint, the main options window will appear, as in Figure 10 -2, where we can:

- Create a blank presentation.
- Or use an existing presentation.
- Or use a ready-made presentation as a template.

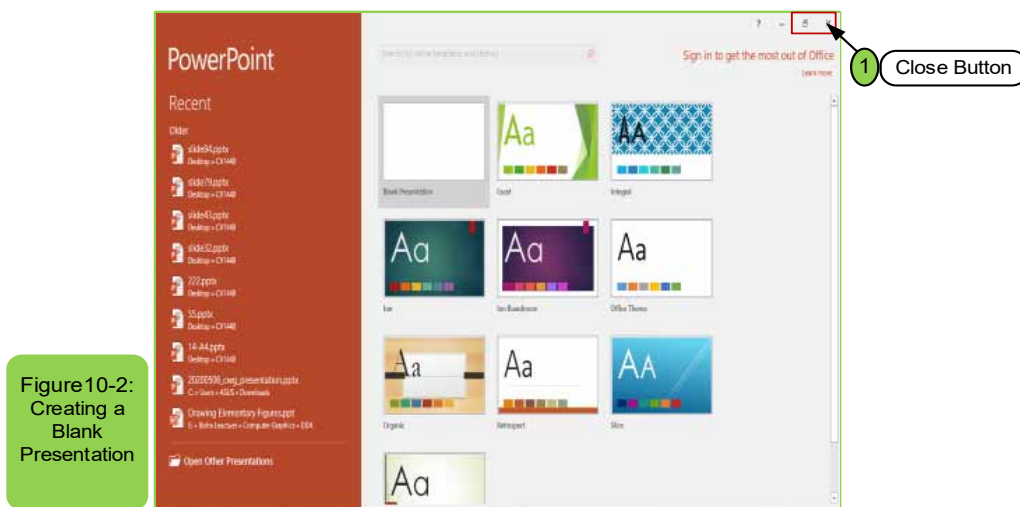


Figure10-2:  
Creating a  
Blank  
Presentation

- To close the PowerPoint program, click the left mouse button on the "X" icon located at the top left of the open window, which closes the file or by using the close button in keyboard (Alt + f4).

#### 10- 4 Interacting with PowerPoint using templates

**Skill 10 - 2**  
Creat New Template or Using Existing Template

We mean with templates in the powerpoint program, files that have already been prepared, and on using this template the program will make a copy. In case of the need to save this template, it will request a new name for the file to save it with this name without causing a change in the main name. There are many templates in the PowerPoint program, and some templates can be downloaded from the Internet. You can also create new templates of your own and with all the formats you want to use it later without having to do formatting again. To be able to create a new template or an existing template, you must use an existing template or file by following these steps:

- From the main options screen of the PowerPoint program, we choose one of the existing templates, or we write the name of the template in a search box about the related templates and themes at the top of the screen, according to the arrow indicated as in Figure 10 -3.

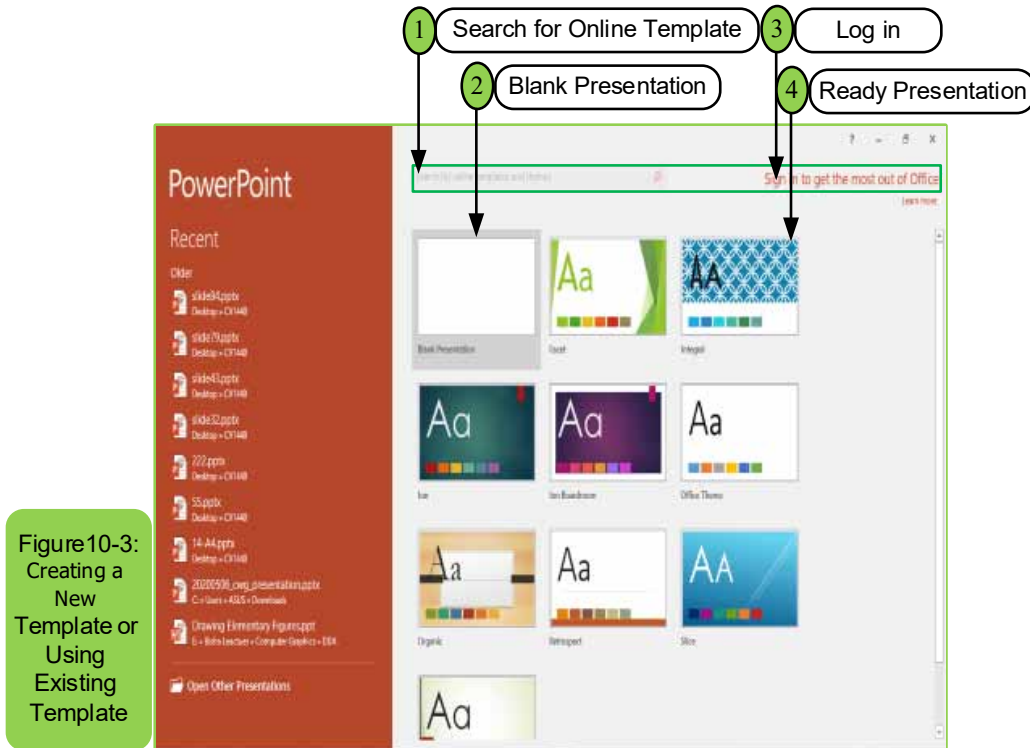
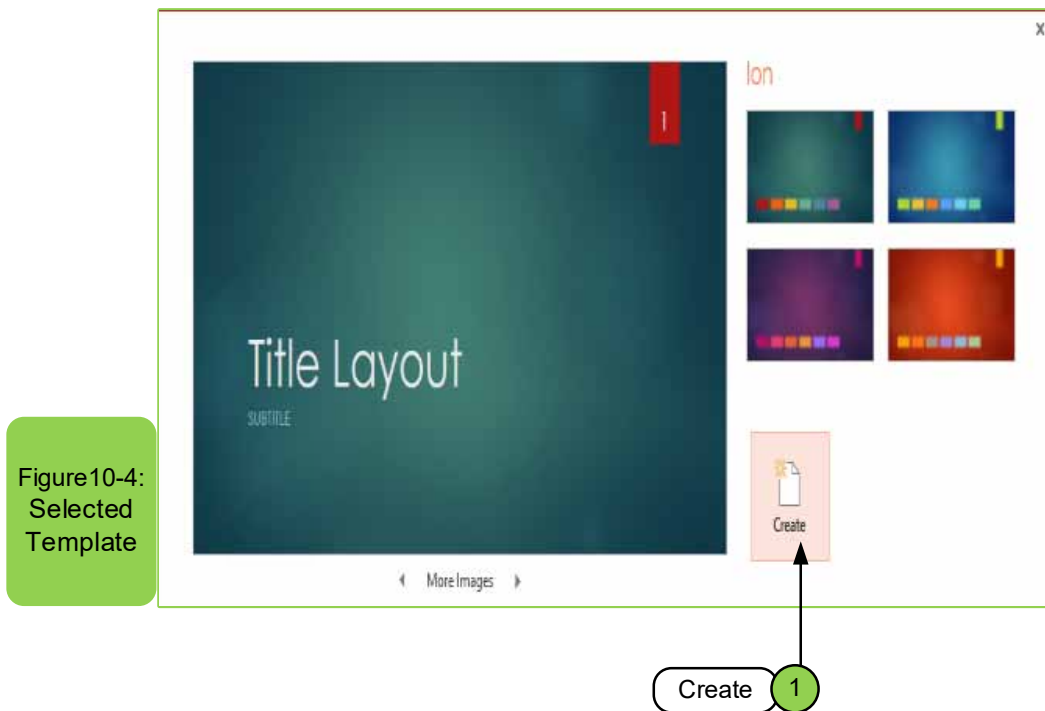


Figure 10-3:  
Creating a  
New  
Template or  
Using  
Existing  
Template

1. **Search box of Templates:** Helps in searching for existing ready-made templates. Or if you know the name of the template and it does not appear in the available templates on the screen, you can type the name and then press the enter key.
  2. **Blank presentation:** This means that it will open a blank slide without formats and the user can perform the format that he wants to add.
  3. **Ready Presentation:** It allows to use one of the ready presentations available within the PowerPoint program.
  4. **Log in:** if you have a Microsoft account to see what is new.
- Once you click on any of the mentioned templates, a set of pre-prepared templates will be shown, and you can choose any of them as needed.

Selecting the template is done by clicking on it with the left mouse button once. A window will appear containing information about the selected template. We can also move from one template to another through the templates in front of you. Once you choose one of the templates, you will see several options for the template itself and we choose what we want by clicking Create as in Figure 10 -4.



Option (1) allows us to create a template from pre-existing templates by clicking on the “Create” option. By clicking on it, the main window of the program will appear to us.

### **How to save the presentation**

**To save a PowerPoint file, there are several ways in which the file can be saved and they are:**

A- Go to:


- File menu in the main window
- Choosing the "Save" or "Save As" command, sometimes we find a difference between the two options. The "Save" option is used when saving a new file for the first time or an updated file. Either the "Save as" option is used in the case of saving the file for the first time, or in the case of a file that has a previous name and we want to keep another copy with a different name.

B- You can press Ctrl + S on the keyboard at the same time.

C- The power point program also allows us to save to old versions, or directly as a PDF file.

## 10-5 The main Interface (Window) of the User

**Skill 10 - 3**  
**Dealing with The Main Window (Interface) of the Microsoft PowerPoint Program**



When you choose the option “blank presentation” in Microsoft PowerPoint 2016, the main user interface for this program appears, as shown in Figure 10 -5, which contains several tabs.

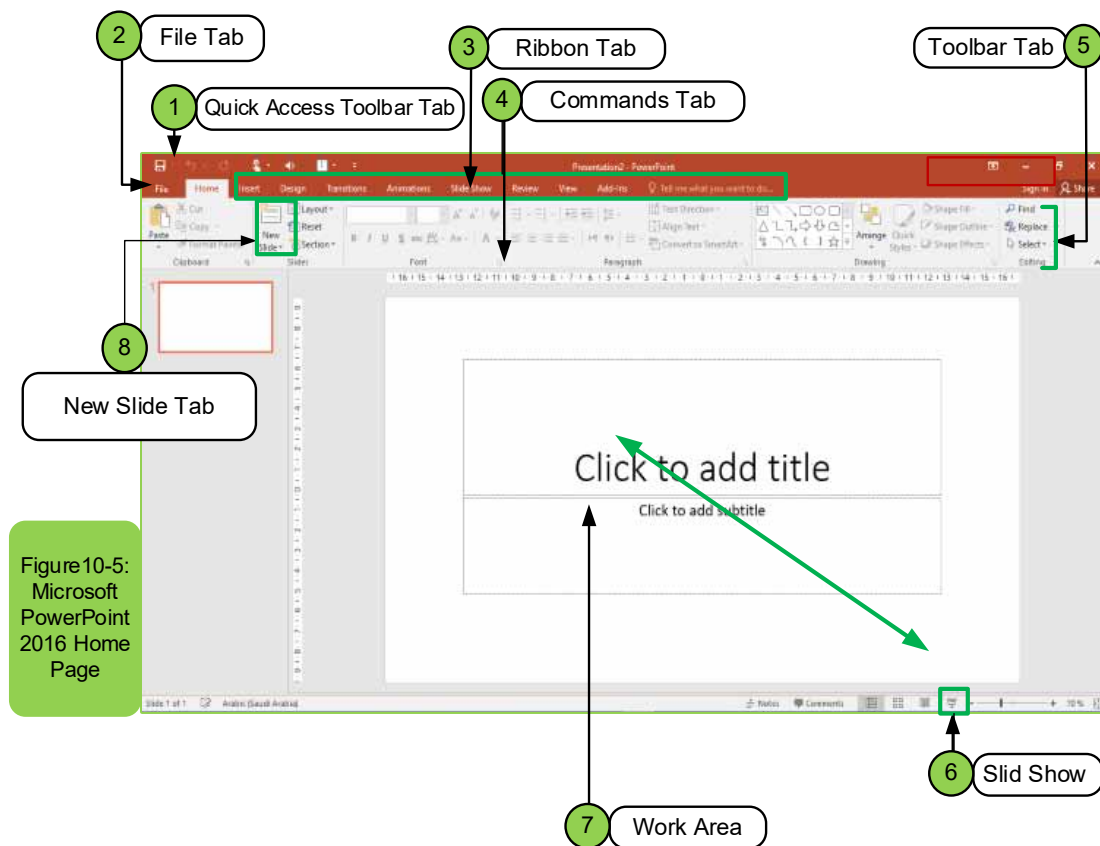


Figure 10-5:  
Microsoft  
PowerPoint  
2016 Home  
Page

- 1. Quick Access Toolbar tab:** The quick access toolbar can appear above or below the Ribbon. To change its location, click the drop-down arrow to the right of the toolbar and click Show below the Ribbon. Through the quick access tools, the user can open a new document, save, or print a file, and there are also other options inside it.
- 2. File tab:** enables the user to open a new page, print, save a file, or open an existing file inside the computer or one of the storage media.
- 3. Ribbon Tabs:** By default, in Microsoft Office PowerPoint 2016 there are more than ten tabs (except for the File menu). Sometimes you will see

coordination tabs that show if you are working with a special type of object. For example, if you are working on a photo.

4. **CommandsTab:** Each tab consists of groups of commands. For example, the Home Tab has clipboard commands, slides, font, paragraph, drawing, and editing.
5. **Toolbar Tab:** Contains numbers of options that enable you to search or replace, select, edit, and more.
6. **Slid ShowTab:** It is the button through which the user can start the show once it is finished or by using the option (F5).
7. **Work area:** The area through which the user can write or edit any text, photos, or table according to what he needs.
8. **New Slide Tab:** allows us to add any number of slides under the master slide.

### 10- 6 Home page Tab in Microsoft PowerPoint 2016

#### Skill 10 - 4 Working with the Home Page Tab



*The home page consists of several groups, as in Figure106-, and they are:*

1. Clipboard group.
2. Slides group.
3. Font group.
4. Paragraph group.
5. Drawing group
6. Finally, editing group

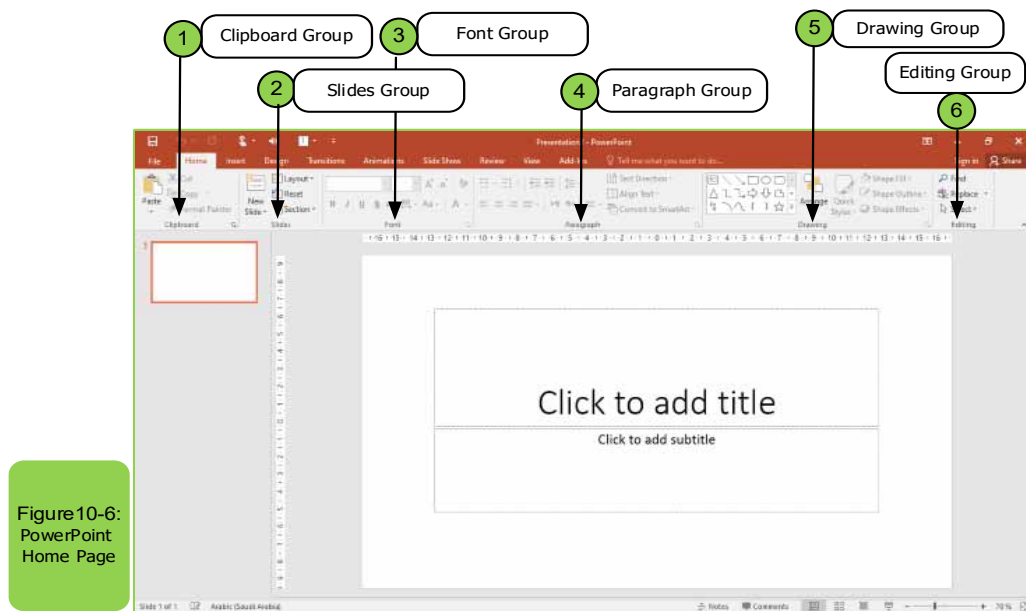







Figure 10-6:  
PowerPoint  
Home Page

**1. Clipboard group:** This group contains several options that can be used continuously within the PowerPoint program, such as an option:




- Paste (  ).
- Cut text (  ).
- Copy text (  ).
- Use the format painter (  ) to copy the formats of selected text to apply it to the rest of the text.

You can also click on the small arrow below the group to add other options (  ). To implement any of the options, we follow the following steps:

- Select the text or shape you want to copy or cut.
- Then we press the Cut option (to cut the original shape or text) or the Copy option (to make a copy with the original copy).
- Then we press Paste (to place it where we want to place it)

Table 10 -1 shows the option type, icon, and abbreviation for easier handling.

Table 10 -1: Shows icons with their abbreviation in the clipboard group

Option Name	Icon	Abbreviation
Paste		Ctrl + V
Cut		Ctrl + X
Copy		Ctrl + C
Format Painter		Ctrl +Shift+ C
Other		-

2. **Slids Group:** This group contains several things that are of great importance for the PowerPoint program, including:









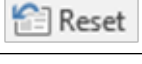










- Add a new slide ().
- It can also show more slide themes ().
- You can make a slide layout or choose another type of slide layout ().
- Reset all slide elements to their original position ().
- Add a section to the slide ().

Table 102- shows the option type and icons for easier handling.

Table 10 -2: Shows the icons in the slide group

Option Name	Icon	Abbreviation
New Slide		Ctrl + N
Slide Theme		-
Slide Layout		-
Rest the slide to its original form		
Slide Section		-

**3. Font group:** This group is considered one of the groups used by which many formats can be made to the text such as changing the type of font (  Calibri Light (C) ) or font size (  ). Also, the font for the text can be made bold (  ), italic (  ), or the text contains a line below it (  ). It is also possible to make a shadow for the text (  ). Also, in the case of using the English language, the letters can be changed from small to capital or vice versa by option (  ) and in many cases we need to change the color of the text (  ) and you can also enlarge and reduce the font size by option (  ) and many other options. To apply any of the options, we follow the following steps:










**A- First method:**


- Select the text to which the option is to be applied.
- Directly choose the format to be applied from the font family within the home page tab.

**B- The second Method,** which is by clicking on the right mouse button after selecting the text and choosing the Font option that shows the interface in which the option can be applied.






Table 10 -3 shows the type of option and the icons for easier handling.

**Table 103-: Shows the icons in the font family**

Option Name	Icon	Abbreviation
Changing the type of font		-
Font size		-
Bold font		Ctrl + B
Italic font		Ctrl + I
Underline the text		Ctrl + U
Shading the text		-
Changing the letters from small to capital		-
Changing text color		-
Increasing or decreasing font size		-

**4. Paragraph group:** It is considered one of the most used groups in all Microsoft Office programs. For example, it is possible to center the text (  ) or



make it to the right (  ) or left (  ) or adjust the text (  ). Also, it is possible to make a bulleted list (  ) or numbered list (  ). We also find there are many other options that can be used by paragraph group. To apply any of the options, we follow the following steps:







**A- First method:**


- Select the text to which the option is to be applied.
- choose the option to apply to the selected text.

**B- Or, by clicking on the right mouse button,** a tab appears, from which we choose the “Paragraph” option, which shows a window through which the option we want can be applied.

The following Table 10 -4 shows the option type, icons, and abbreviation for easier handling.

Table 10- 4: Shows icons in a paragraph group

Option Name	Icon	Abbreviation
Centering the text		Ctrl + E
Align the text to the right		Ctrl + R
Align the text to the left		Ctrl + L
Adjust the text		-
Making bulleted list		-
Making numbered list		-

**5. Drawing group:** This group allows us to add shapes and drawings within the PowerPoint slide, for example, we can add and choose any shape that we want to use by clicking on the Shapes (  ) option that shows you many shapes, one of which can be chosen. To add any shape, we use the following steps:

- From the "Home Page" tab, we select "Shapes" that are located within the drawing group, and a menu appears as in Figure10 -7.
- We choose the shape that we want to insert by clicking on it with the left mouse button.
- Go to the place we want to place the shape in and press the left mouse button to apply.

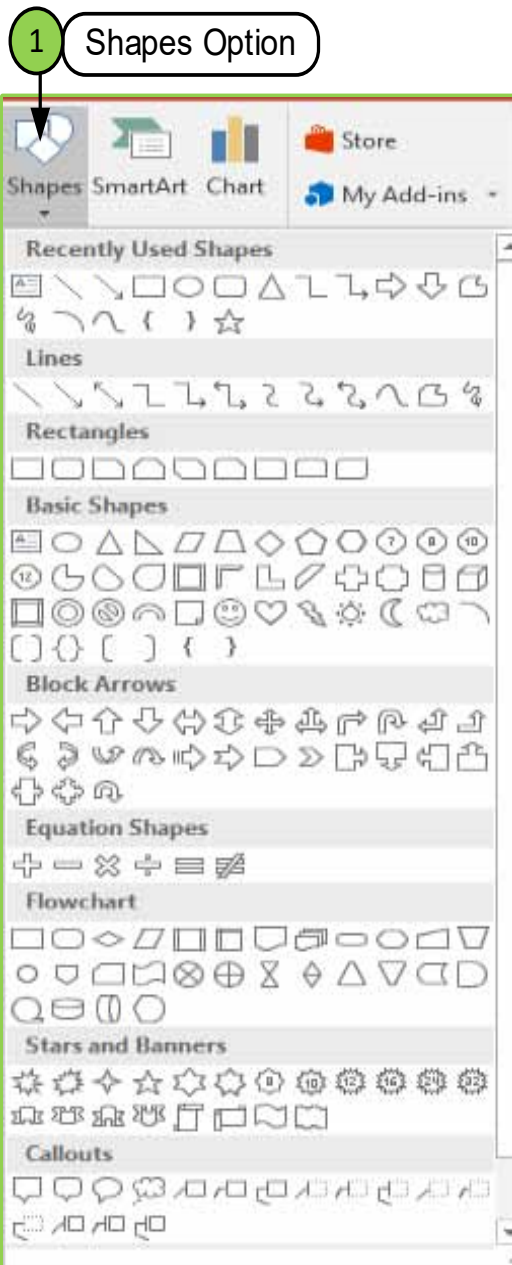



Figure10-7:  
Insert  
Shape

The objects on the slide can be changed and arranged through the option (  ). To change the order of a specific object inside the slide, we use the following steps:

- From the "Home Page" tab, we choose "Arrange" which is located within the drawing group, so a menu appears as in Figure10- 8.
- We choose the option that we want to apply to a specific object in the slide by clicking on it with the left mouse button.

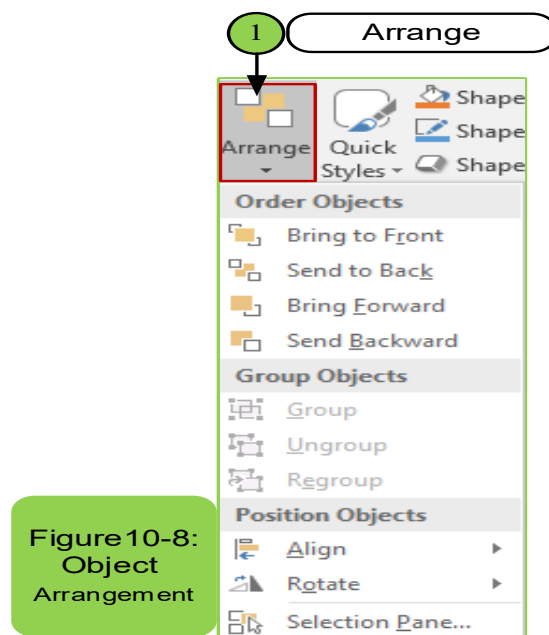






Figure 10-8:  
Object  
Arrangement

We can add different styles to the shape as desired by pressing option (  ). Various effects can be added to the shapes by clicking on the option (  ) in addition to coloring or filling the shape through the option (  ). The drawing group contains other options that can be obtained by clicking on the arrow (  ) at the end of the group as in the previous and subsequent groups. For example, to fill a specific shape inside a slide, we use the following steps:

- From the "Home Page" tab, we choose "Shape Fill" that is located within the drawing group, and a menu will appear to us, as in Figure10- 9.
- We choose the option that we want to apply to a specific shape in the slide by clicking on it with the left mouse button.

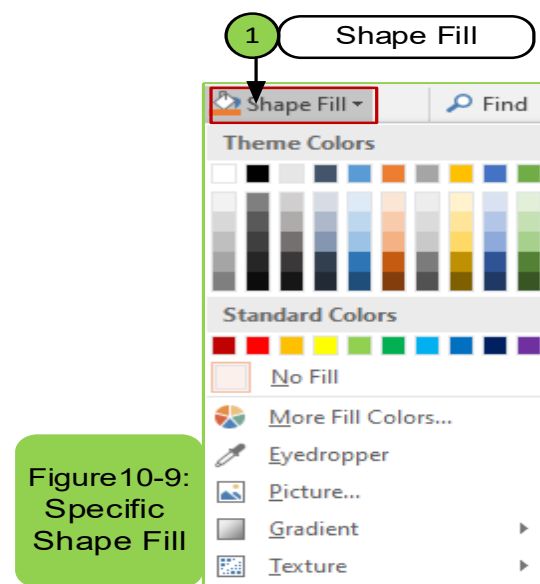

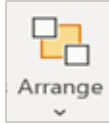









Figure 10-9:  
Specific  
Shape Fill

Table 5 -10 shows the type of option and icons to facilitate their handling.

**Table 5 -10: Shows the icons in the drawing group**

Option Name	Icon
Shape option	
Arrange Objects in the slide	
Add Shape styles	
Add Shape effects	
Add Color and fill	
other	

6. **Editing group:** This group enables us to have several options, for example:

- If we are searching for a word inside the PowerPoint presentation, we can use the option ( Find) or by pressing (Ctrl + F).
- Through this group we can replace a word inside text by option ( Replace ▾) or by pressing (Ctrl + H).
- It is also possible through this group to select a specific text or all the text inside the PowerPoint slide through the option ( Select ▾) or press (Ctrl + A).
- We find the explanation above shows all the options within the home tab we hope we have covered within this course. For example, to search or replace a word within a slide we use the following steps:
- From the "Home" tab, select "Replace", which is located within the "Editing" group, and a menu appears for us, as shown in Figure10- 10.
- We choose the "Replace" option by clicking on it with the left mouse button. A window appears to enter the word you wish to replace and the replacedword.

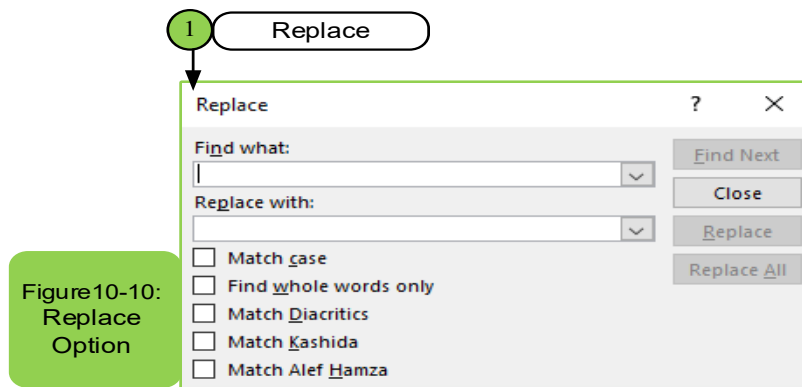





Figure10-10:  
Replace  
Option

Table 10 -6 shows the option type and icons for easier handling.


Table 10- 6: Shows icons in an editing group

Option Name	Icon	Abbreviation
Search for a word	 Find	Ctrl + F
Replace a word	 Replace ▾	Ctrl + H
Selecting specific text or all the text	 Select ▾	Ctrl + A

### 10 -7 Insert Tab

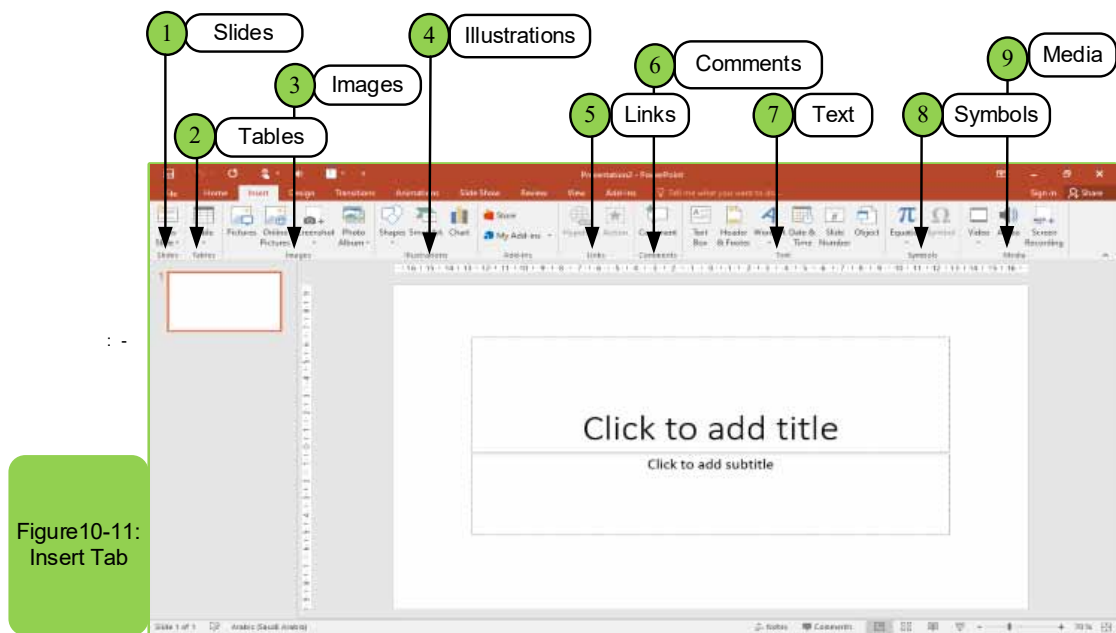
**Skill 10 - 5**

Using the Groups included in The Insert Tab





The Insert tab consists of several groups (or orders) as in Figure10- 11 which are:

- Slides.
- Tables.
- Images.
- Illustrations
- links.
- Comments.
- In addition to two sets of text and media.



Also, some groups will have a small button in their lower left corner, clicking on this button will open a list with more features associated with that group.

**1. Slides Group:** This group contains several options such as:

- Insert a new slide by pressing (  ).
- Choose a slide theme from the existing themes by clicking on the small arrow in the right of the shape (  ) that gives you several options such as title slide or title and content ... etc.
- It contains several other options that user can use, such as choosing the appropriate layout that you want to use to create the slide by clicking with the mouse on the layout that you want to use.
- Another way to choose a specific layout is:
  - Clicking the right mouse button in the existing slide will show you several options, including the layout
  - Click on the Layout option. Layout options appear as in Figure (10- 12).

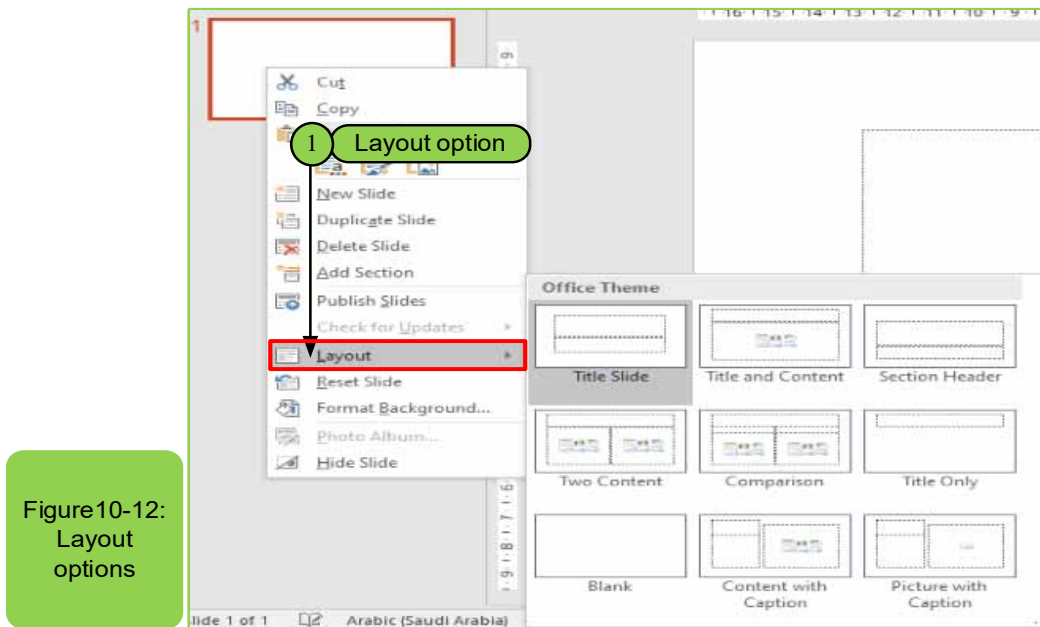



Figure10-12:  
Layout  
options

**2- Table Group:** This group considers its commands are important commands that we use within the power point program and it has several methods:

- **First method:** Insert a table (  ) with a certain number of rows and columns by dragging on the slide to create a table with a specific size, which is as follows.
  1. Place the mouse pointer where you want to insert a table.
  2. On the “Insert” tab, click Table option, then drag the table dimensions onto the grid, then click the left mouse button, see Figure 10 -13.

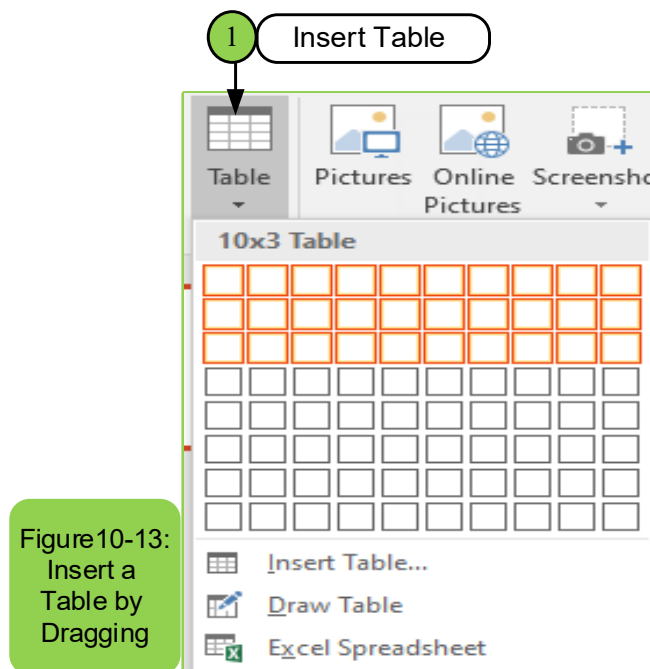
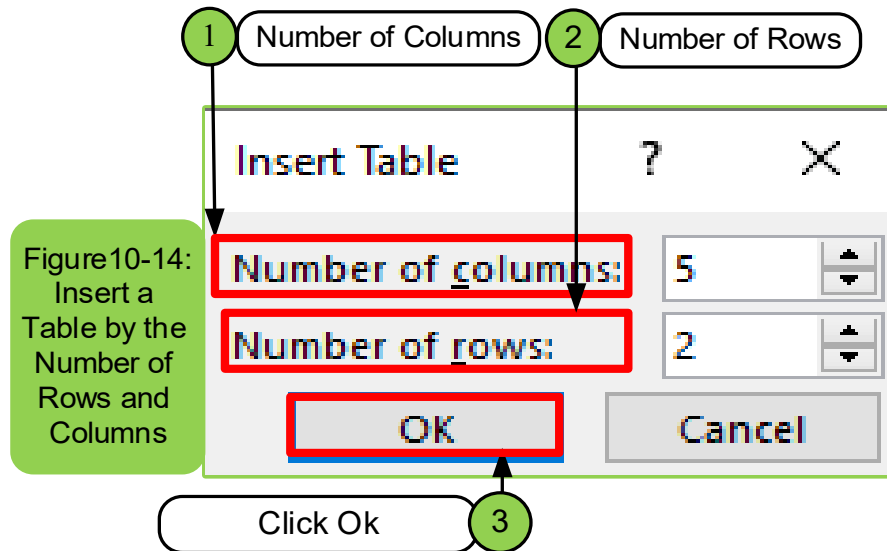






Figure10-13:  
Insert a  
Table by  
Dragging

- **The second method:** Use the “Insert Table” command located within the “Table Tab”, then specify the number of rows and columns and click “OK” as in Figure 10- 14.



**3. Images Group:** This group is used to add pictures through several options:

- Add photos from the internet directly by clicking on the option (  ).
- Add photos through an open window on the screen (  ).
- Insert an image on the computer by pressing option (  ).
- Insert an image from an existing or created photo album (  ).

And in each option, by simply clicking on it or the arrows next to it, you will see several options that help you to accomplish the work and to insert an image exists inside the computer, we follow the following steps:

- Determine where to insert the image by left-click.
- From the “Insert” tab, choose “Image” that is located within the “Images” group as shown in Figure 10 -15.
- The Image window appears for us and we select the image we want to insert and click on it with the left mouse button.
- Click on the “Insert” option to execute.



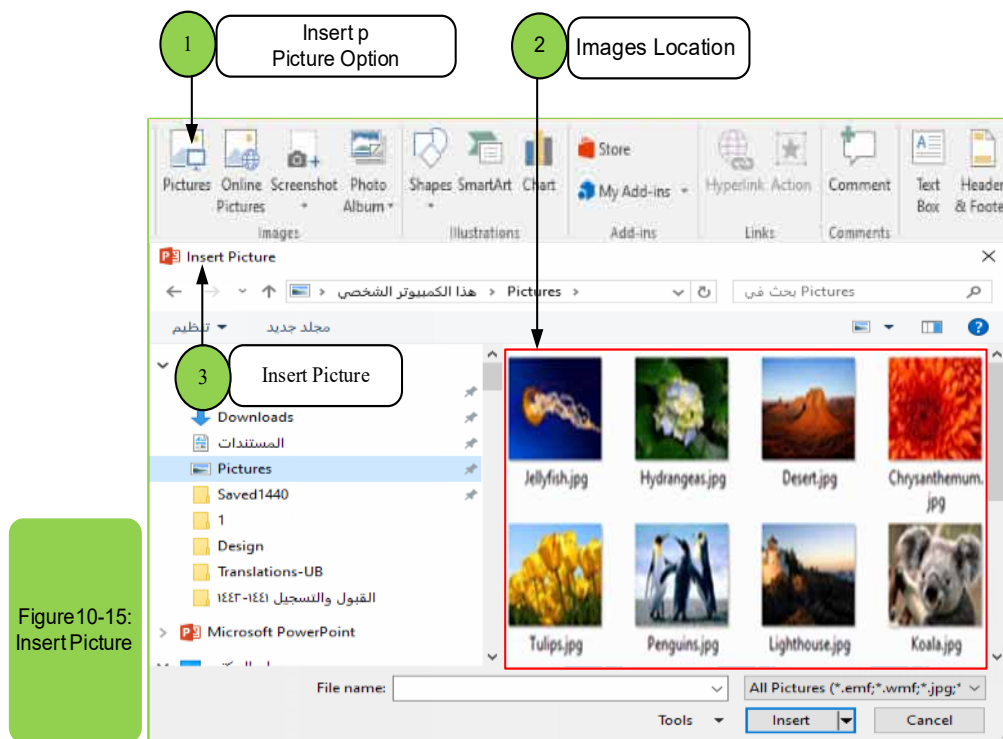



Figure 10-15:  
Insert Picture

**4. Illustrations group:** We find in the Power Point presentation program we can include automatic shapes such as:

- Circle and rectangular shapes or arrows.
- Add flowcharts.

**To add shapes inside the Slide of powerpoint program, go to:**

- Insert tab.
- Choose the Shapes (  ) option within the group for illustrations.
- It displays several shapes.
- Through which the shape to be applied is chosen as in Figure 10-16.

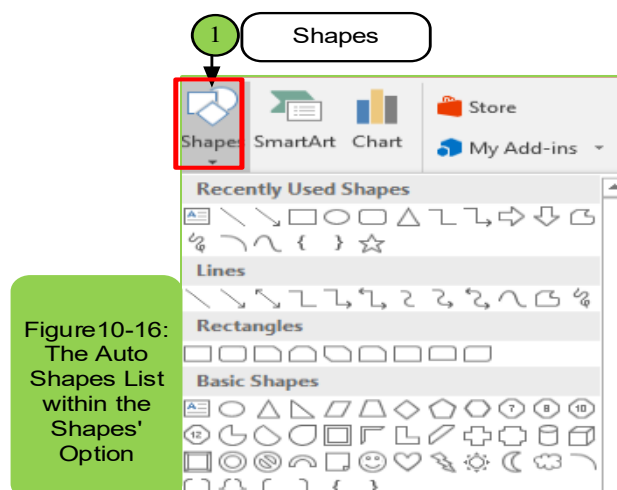


Figure 10-16:  
The Auto Shapes List  
within the  
Shapes'  
Option

*If you need to add SmartArt, we follow these steps:*

- From the "Insert" tab, choose "SmartArt", which is located within illustrations group, click on it with the left mouse button, and a list will appear, as shown in Figure 10 -17.
- We go to drawing options to choose the desired drawing shape
- Then we choose the desired shape
- We click on the "OK" button to apply the required shape

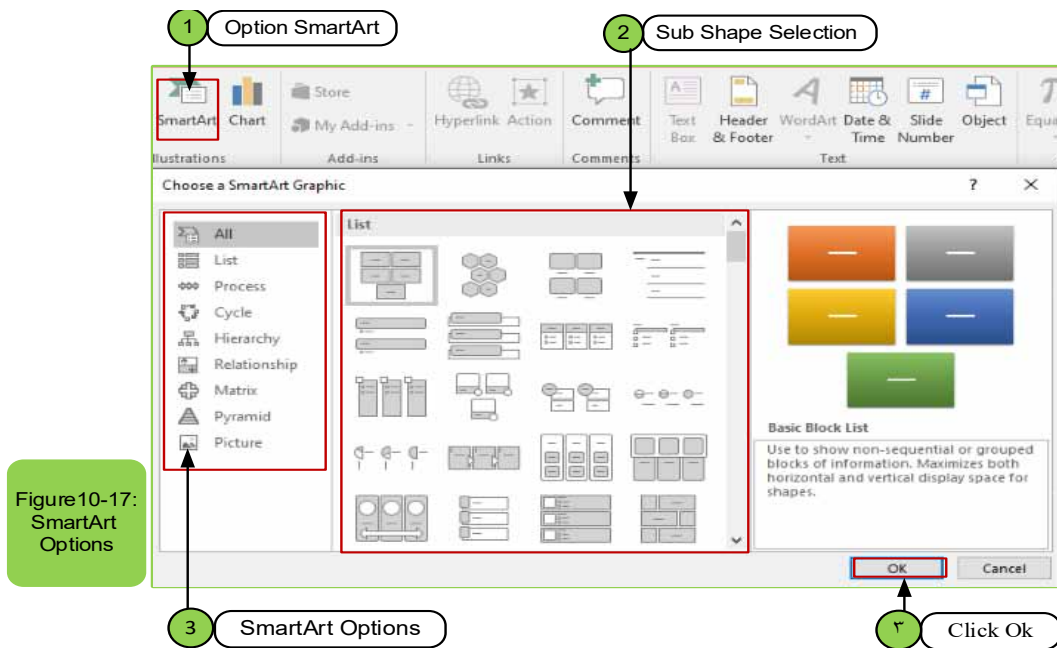



Figure10-17:  
SmartArt  
Options

The illustrations group also contains the chart option (  ), through which you can show many shapes that can be inserted, which often help us to represent the data and also can be used within the powerpoint program. When you click on the chart option, the following screen appears for you as in the figure10 -18.

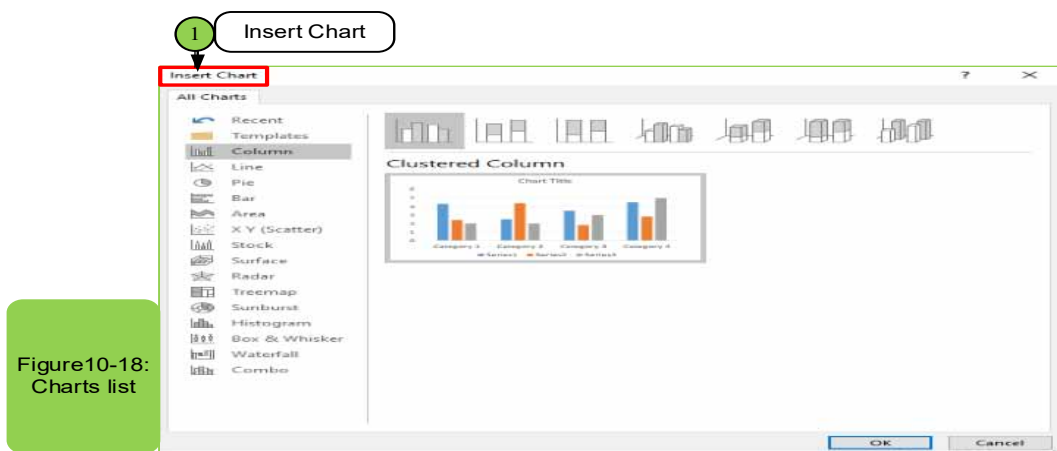



Figure10-18:  
Charts list

**5. Links group:** This group is considered one of the commands through which it is possible to:

- Connect the slide to internet.
- Or link it with another slide.

The option hyperlink (  ) links (text, images or anything) either to a web page or an email or to other slides and when you click on it the screen will appear as in Figure 10- 19.

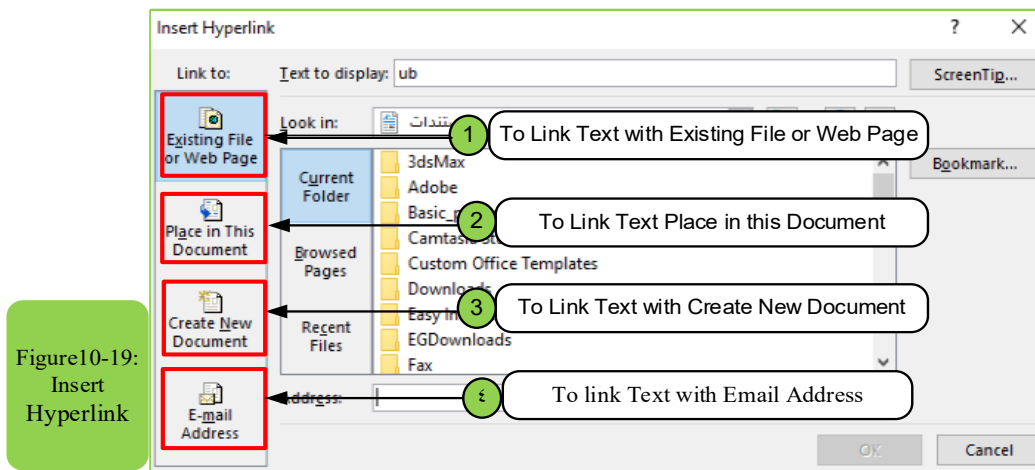



Figure10-19:  
Insert  
Hyperlink

There is also another option is the option action (  ), through which a feature can be added. When clicking on any object or moving with the mouse over it, you will either be taken directly to the slide that you have selected to perform the action or open a program. When you click on it with the mouse, the figure 1020- appears to us.

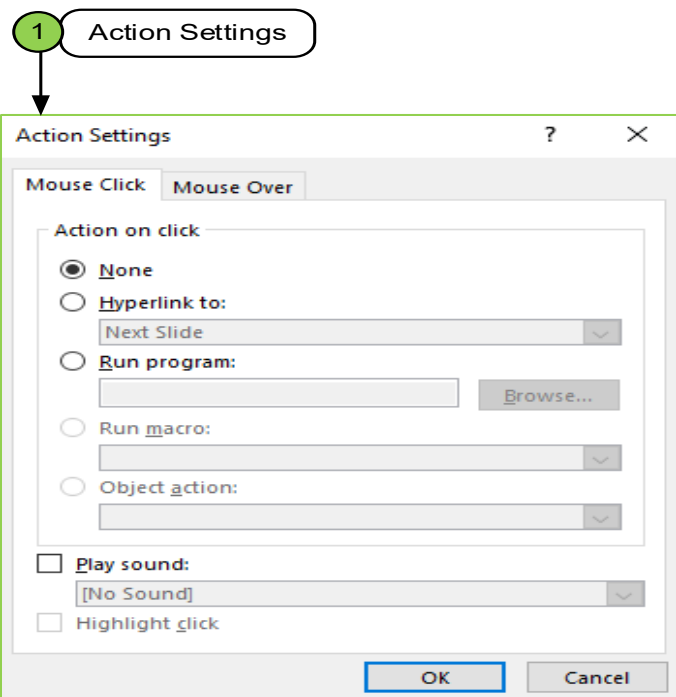

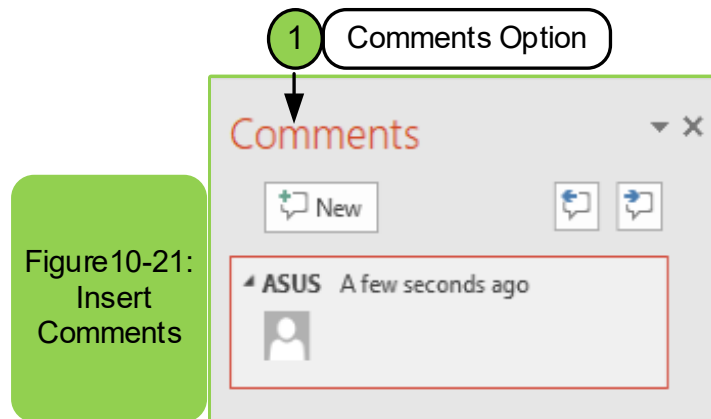
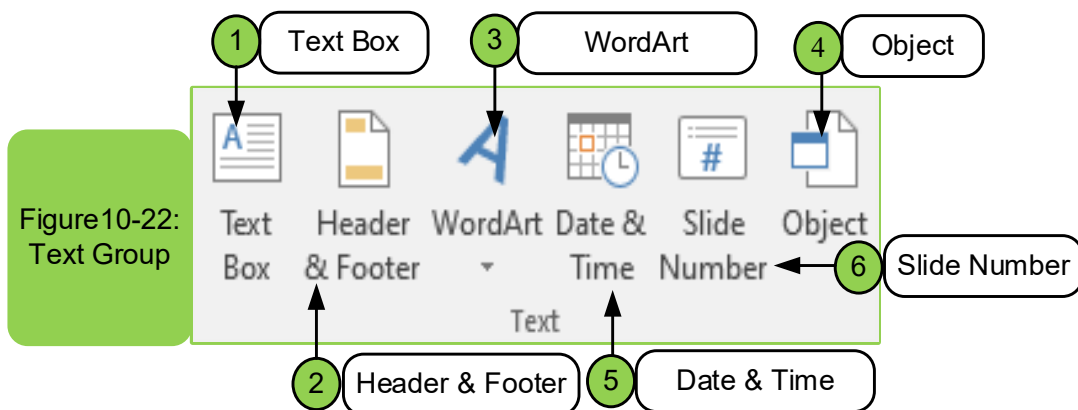




Figure10-20:  
How to Use  
Action  
Setting

There is also the option Comments in which you can insert a comment by clicking on the option (  ), and when you click on it the screen appears as in Figure10- 21.



**4. Text group:** This group is considered one of the most important groups that are used continuously within any slide and through which many edits can be made to the text or slide and the most important commands of this group appear in Figure 10- 22. We will explain the contents of this group.



From Figure 10- 22 we can make several commands such as adding a text box through the option (  ) and this is done by clicking on it and then we write the required text inside the box that appeared to us. Also, we can add a header and footer for the page through the option (  ) which by clicking on it and choosing it, the screen appears as in Figure 10- 23. The options inside the header and footer allow us to add a time and date to the slide. It also enables us numbering the slide according to the available numbering, also we can add footer and an option that contains do not show on title slide.

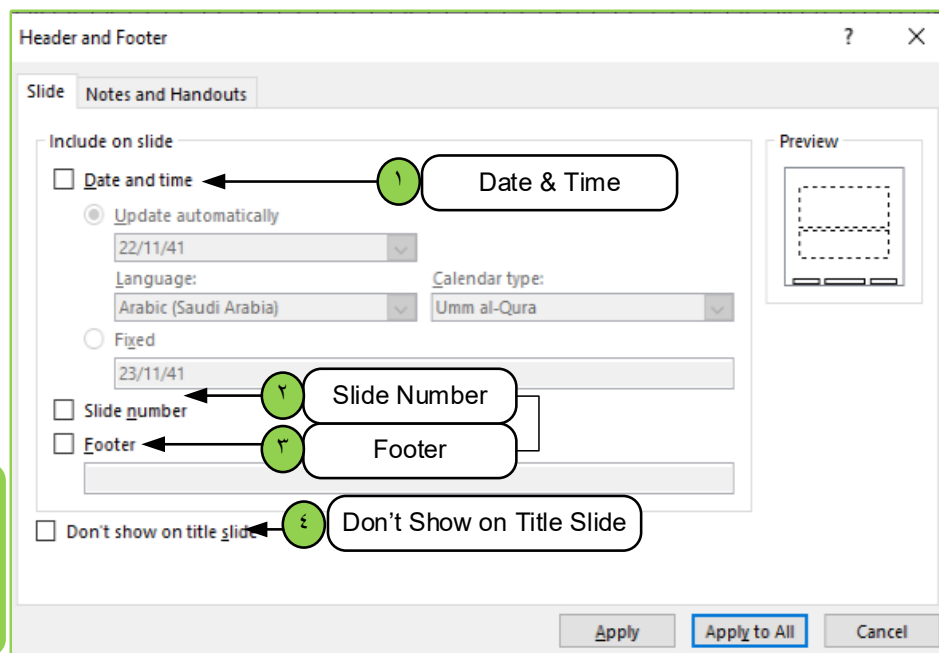



Figure 10-23:  
Insert  
Header &  
Footer

Also, from Figure 10- 22 we can write words in artistic ways by clicking on the option (  ) that shows several styles and we can choose the style that we want to apply as in Figure 10 -24. When choosing the style, we want to use, we add the text that we want to write inside the style.

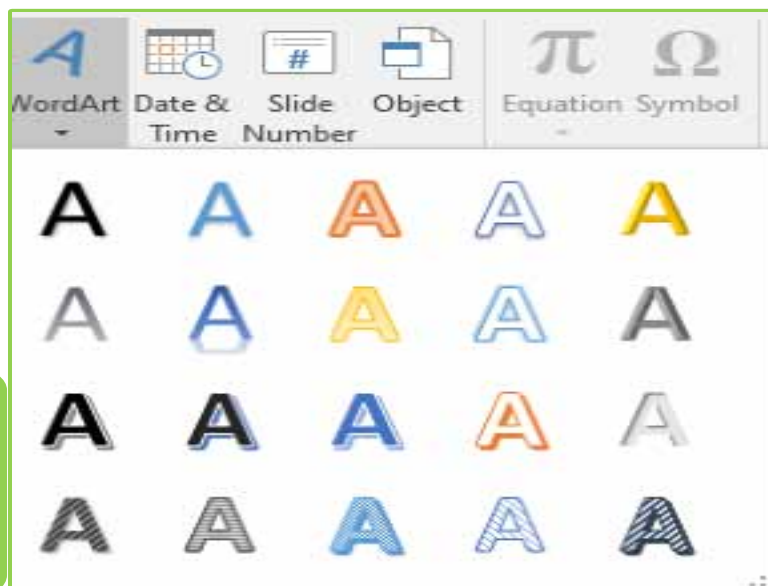





Figure 10-24:  
WordArt  
Styles

**Through this group, you can add:**

- Date and time by clicking on the option (  ), and when clicking on it, the same screen appears in Figure 10 -23.
- We can insert the slide numbers through option (  ), which by choosing it also shows as in Figure 10 -23.

- Also we find inside the text group there is another option which is the ability to add an object by clicking on the option (  ) and when pressed it the screen appears as in Figure10 -25.

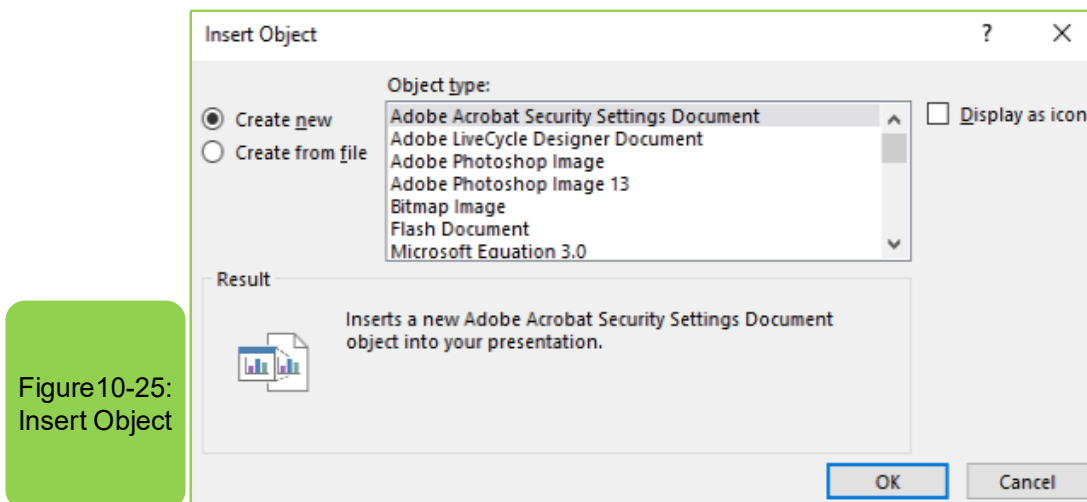






















Figure 10-25:  
Insert Object


We find that the option insert an object enables us to insert equations through which we can write an equation or files (pdf) and save it with a PowerPoint document, and through it we can choose the document that we want to insert as there are many other options that can be inserted through the object option. Table 7 -10 shows all options and clarifies their required icons.

Table 710-: Shows the icons in an insert group

Option Name	Icons
Insert new slide	
Insert new slide theme	
Insert table	
Insert photo from internet	
Insert photo from screenshot	

Option Name	Icons
Insert picture from the computer	 Pictures
Insert image from photo album	 Photo Album ▾
Shaps	 Shapes ▾
Chart	 Chart
Insert SmartArt	 SmartArt
Hyperlink	 Hyperlink
Action	 Action
Comments	 Comment
Insert text box	 Text Box
Header and footer	 Header & Footer
Insert word art	 WordArt
Insert time and date	
Insert Slide number	
Insert an object	

**7. Symbols group:** This group is considered one of the groups through which we can insert any symbol inside the slide, especially mathematical symbols that are not present on the keyboard. An symbol option (  ) can be used to insert a symbol that is not present on the keyboard and when it pressed:

- Identify where we want to add the symbol.
- Go to "Insert tab" and choose symbol option (  ).
- Many symbols appear to us as shown in Figure 10 -26
- Then we choose the symbol we want.
- Then press the "Insert" button to apply the option.

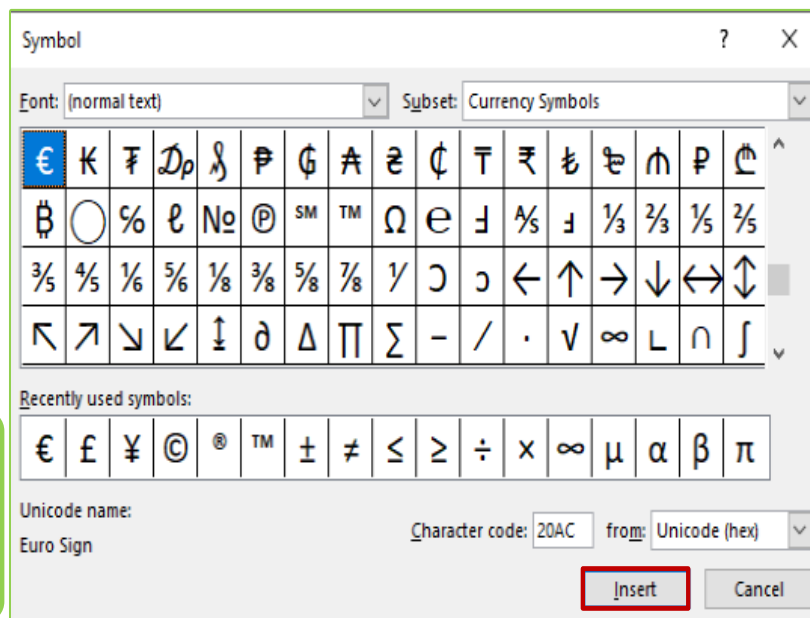



Figure 10-26:  
Insert a  
Symbol

Also in the case of the need to add a mathematical equation or any mathematical symbol, we can do that through the option equation (  ) and when you pressed it allows the possibility of inserting or writing any equation as in Figure 10 -27 that enables us to use an existing equation or create a new equation. Table 10- 8 shows the icons in a symbol group.



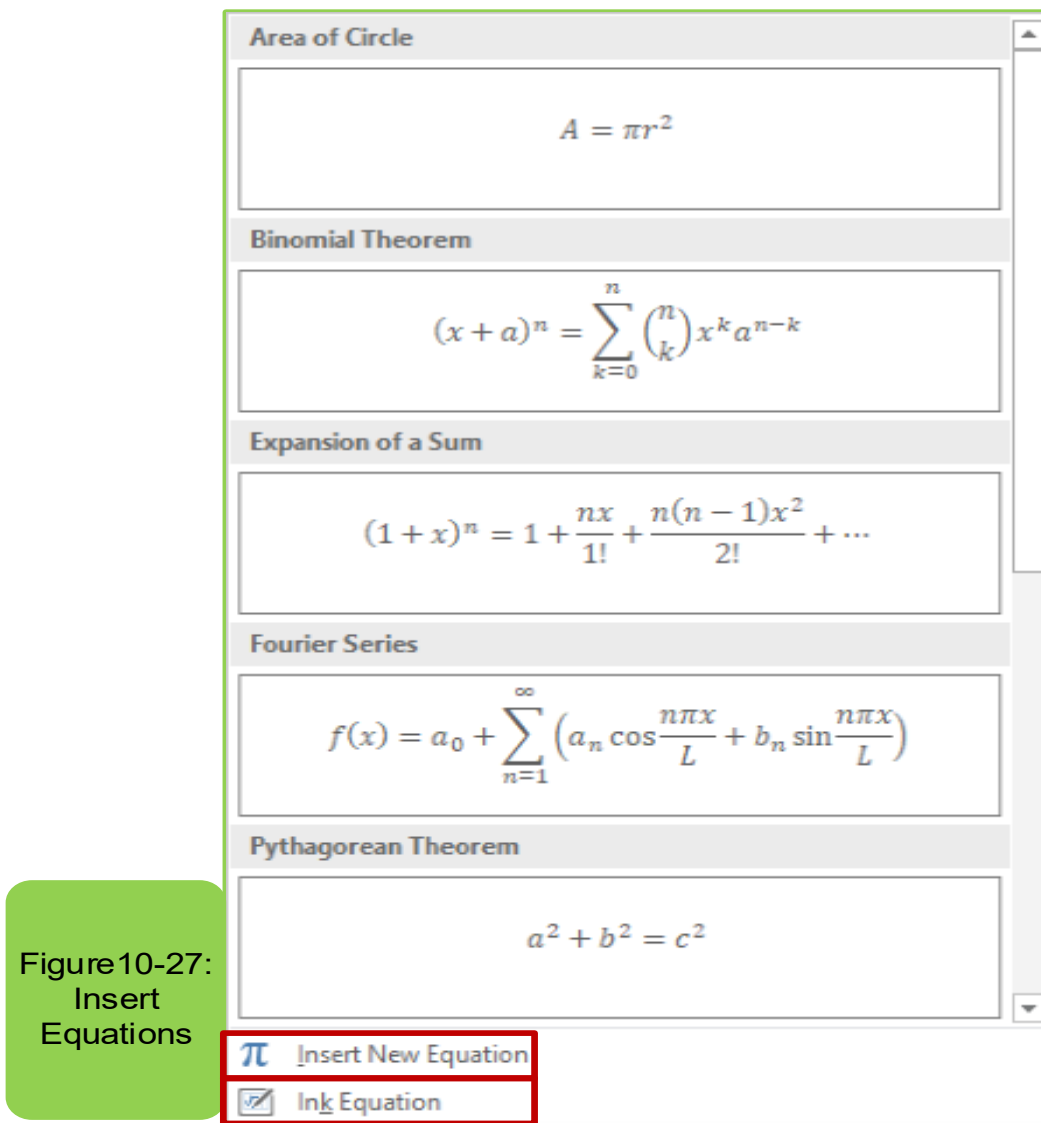







Figure 10-27: Insert Equations

Table 10 -8: Shows the icons in a symbol group

Option Name	Icon
Insert equation	
Insert Symbol	

**8. Media group:** This group is the last group within the insert tab and through it a video can be inserted by pressing the command (  ) or sound (  ) and it is also possible to record and add sound to the slide (  ). When adding a video, clicking on the video option, and when clicking on it, the screen will appear as in Figure (228-), which allows us to add video via the internet and in this case you must be connected to internet or the option video on my PC and then you choose the video you want to insert. Also, in the case of the need to record a sound, two

options appear to us, one of which is choosing the voice from the computer or recording the sound. As in case of using the other option to record and add sound to the slide, the options in Figure 10- 28 show to us.

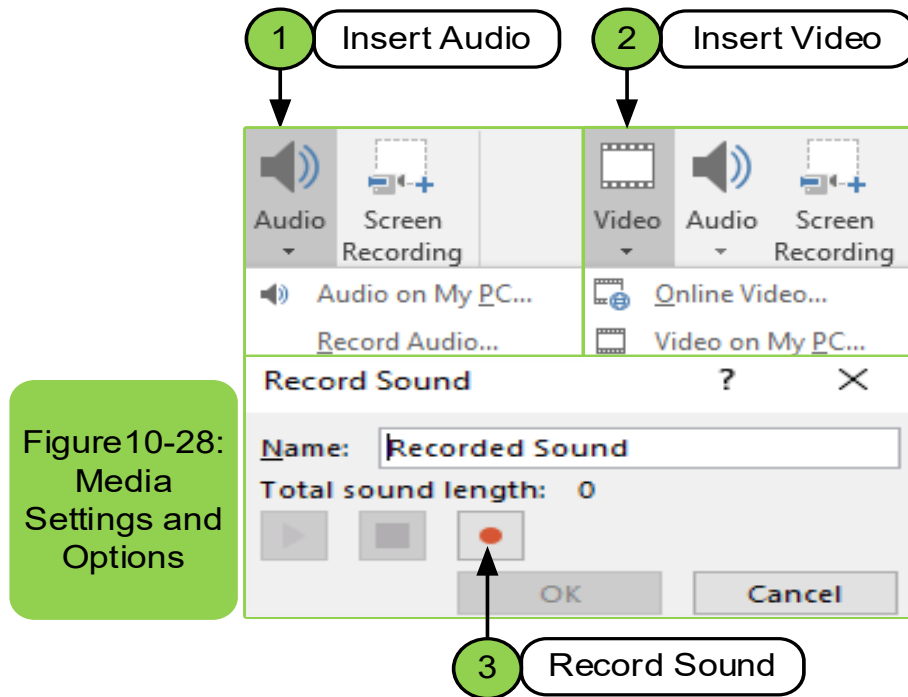





Figure 10-28: Media Settings and Options


Table 10 -9 shows options within the media group with their icons.

Table 10 -10: Shows icons in the media group

Option Name	Icons
Insert video	
sound	
Screen recording	

10- 8 Design Tab

**Skill 10 - 6**  
Working with Design Tab



The Design tab consists of several groups (or commands) such as a themes Group, variants group, and customize Group, as in Figure10 -29. Also, some groups will have a small button in their lower right corner. Clicking this button will open lists with more features associated with that group.

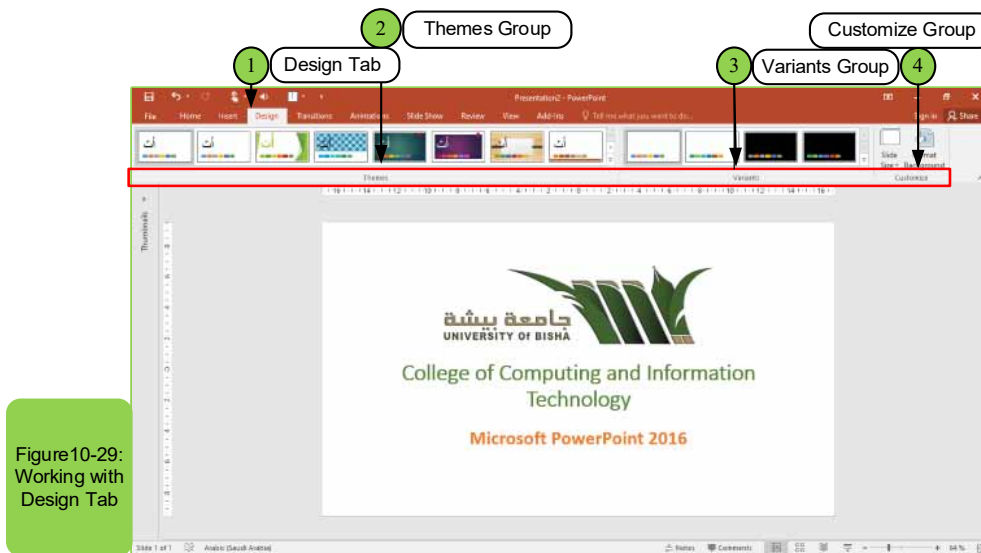


Figure10-29:  
Working with  
Design Tab

**1. Themes group:** It is the group through which one of the themes is chosen to apply to the slides as in Figure10 -30. Once you have selected a specific theme you must choose a design from set of different designs in order to apply the theme to it.

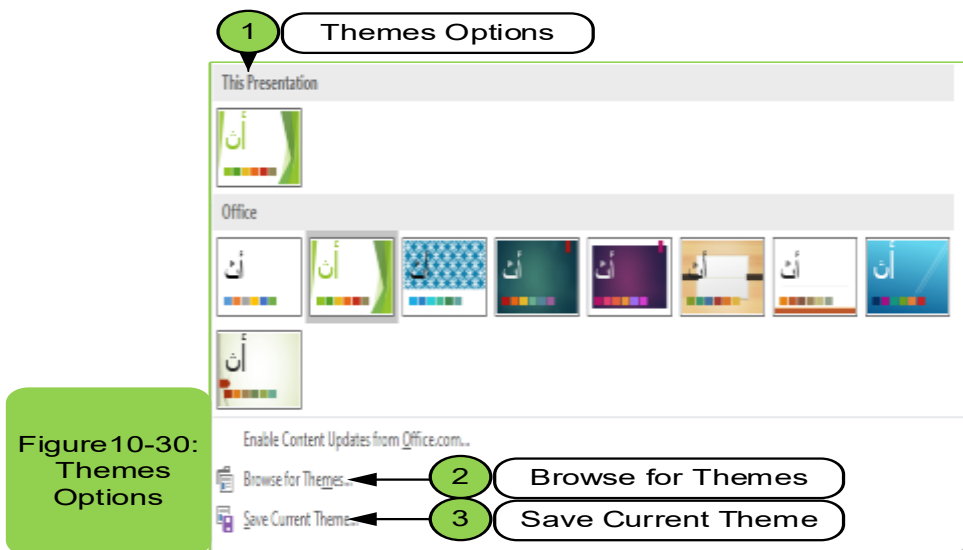


Figure 10-30:  
Themes  
Options

2. **Variants group:** In this group we choose the theme that we want to apply to the slide as in Figure1031-, which gives us many options through which it can be added to the slide such as color options, font options, effects, and in addition to the styles that we want to apply which gives strength to the presentation.

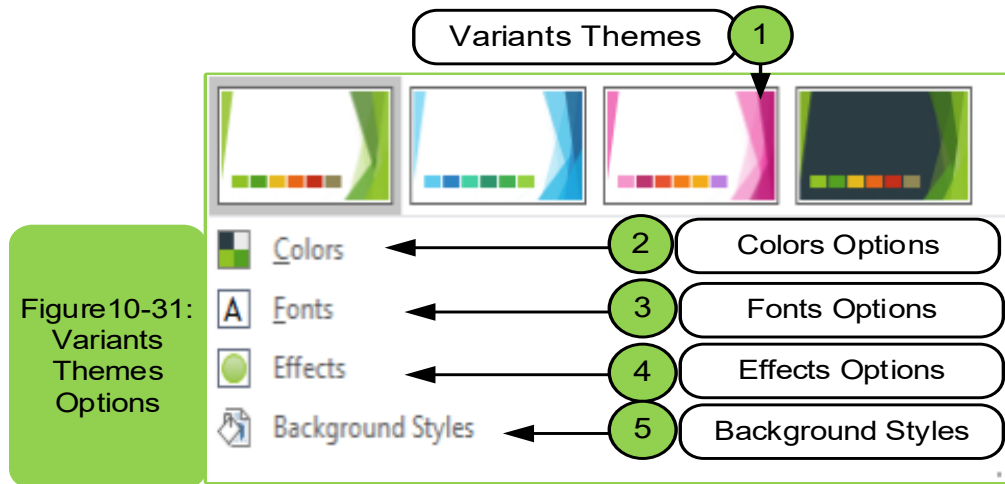




Figure 10-31:  
Variants  
Themes  
Options

3. **Customize group:** This group enables us to choose the slide size by pressing the slide size option (  ) or formatting the slide background by pressing the background format option (  ). And when choosing the slide size option, it allows us to choose the available size that we want to apply to the presentations. In the case of the need to change the format of the background, we can through the option format the background that provides us with several options, as in Figure10 -32 through which you can arrange or hide design elements by the current design.

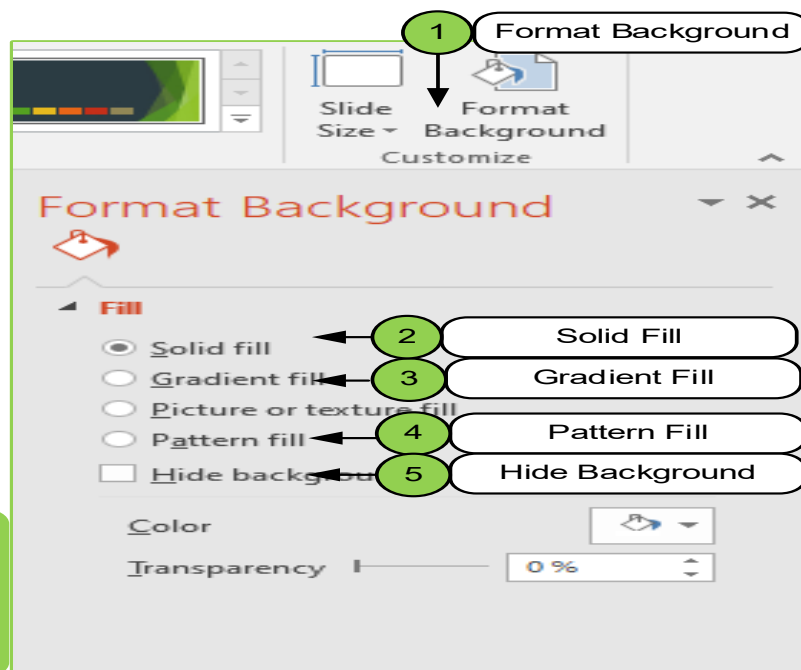



Figure 10-32:  
Format  
Background

10- 9 Transitions Tab

**Skill 10 - 7**  
Using Groups included in Transitions Tab



The Transitions tab consists of several groups (or commands) as in Figure 10- 33, such as:

- Preview group.
- Transition to this slide.
- Timing group.

Also, some groups will have a small button in their lower right corner, clicking on this button will open a list with more features related to that group and it is related to the slide as a whole in case of needing to add a transition method.

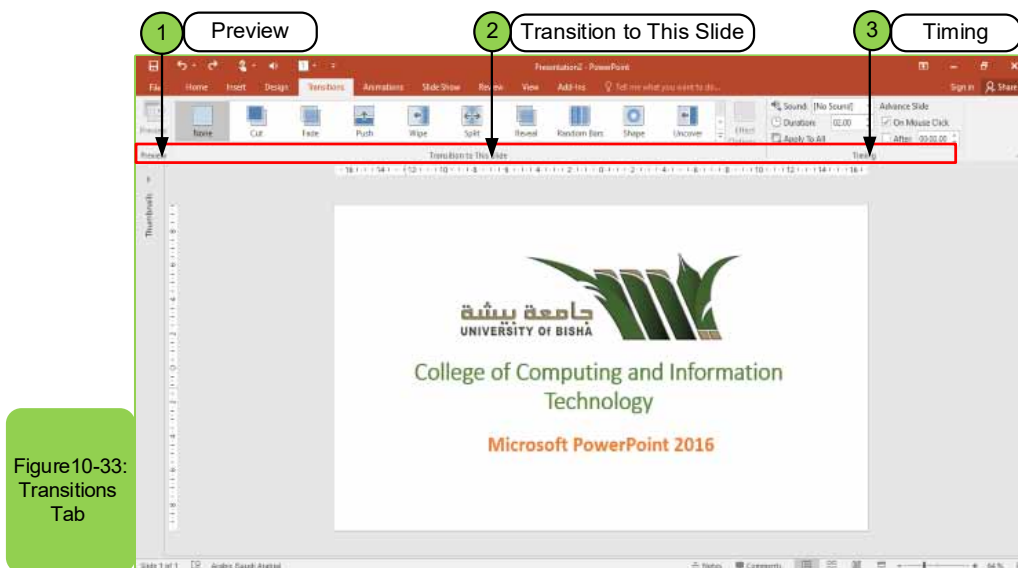


Figure 10-33:  
Transitions  
Tab

1. **Preview group:** It is the group through which a preview for the selected transition to this slide is applied as in Figure 10- 34. Once you have chosen the transition, it will be immediately performed, and the shape of the preview command will turn into a preview with a star during the execution.

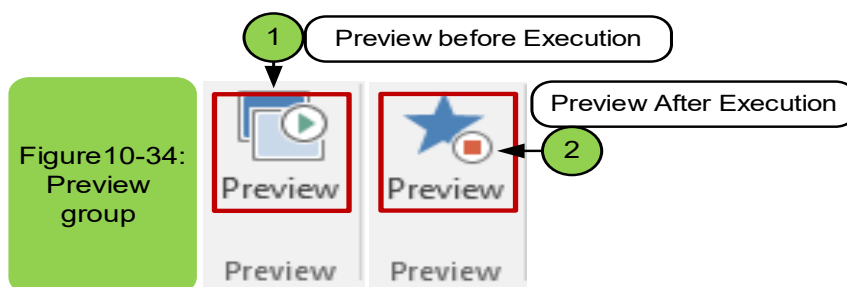


Figure 10-34:  
Preview  
group

To apply the commands in Figure 1034-, first you must determine the transition from the second group, after which the command can be executed or paused.

**2. Transitions group:** It is the group through which a transition (animation) is chosen to be applied on the chosen slide and we find that there are many options for animations that can be applied to the slide as in Figure 10- 35. Once you have chosen the transition it will be done directly, and the shape of the preview turns into a preview with a star during execution. Also, through the effect options, several effects can be added to the transitions such as the effect being vertical or horizontal.

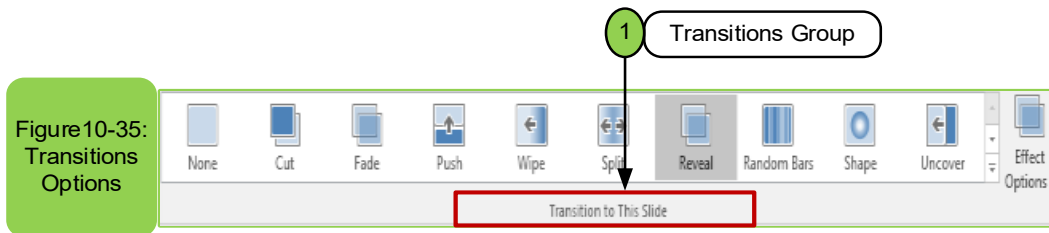


Figure 10-35:  
Transitions  
Options

**3. Timing group:** It is the group through which the way to add sounds to the slide during the transition is chosen, and through it the timing of the transition between slides can be determined as in Figure 10 -36.

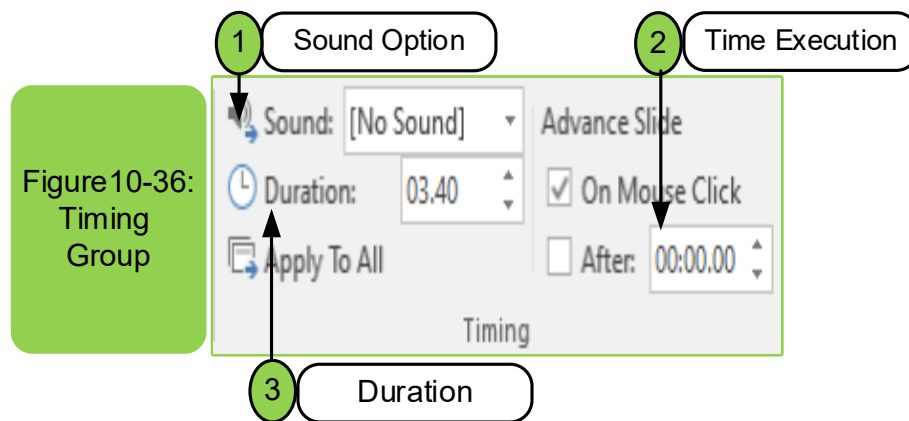


Figure 10-36:  
Timing  
Group

We find on using sound options, they help us to choose the appropriate sound among the existing sounds that we want to show during the transition between slides while we find the (duration), it helps us in determining the duration of the transition to the next slide while the option of (after) means the duration of the slide and then the transition to next slide. Finally, after choosing the animation you want to apply and you want to apply it to all slides, just click (apply to all).

10- 10 Animations Tab

**Skill 10 - 8**  
Using the Group included in Animations Tab



The animations tab consists of several groups (or commands) such as preview group, animation group, advanced animation group, and timing group, as in Figure10- 37. Also, some groups will have a small button in their lower right corner, clicking on this button will open a list with more features associated with that group and animations tab to make the animation for part of the text or the entire text in the slide.

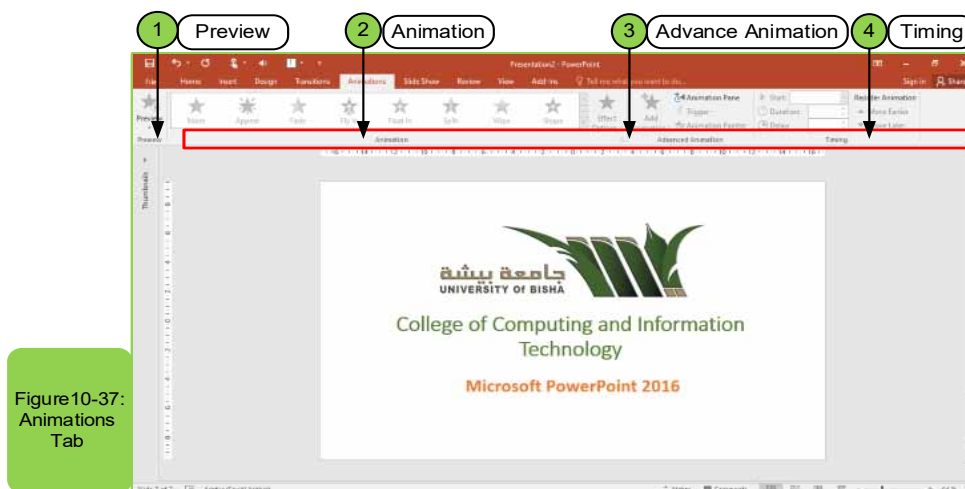



Figure10-37:  
Animations  
Tab

**1. Preview group:** It is the group through which a preview of the selected animation from the options of animations or advanced animation is applied. Once you choose the animation it will be performed directly, and the shape of preview will turn into a preview with a star during the execution and the animation is performed on a specific text, picture, or anything inside the slide.

**2. Animation group:** This group contains number of animations that can be applied on the selected text in the slide as in Figure10- 38. First, you must select the text and then choose the animation that you want to perform. Also, the effect of the selected animation can be changed by choosing the effect options (  ) Also, there is the ability to add effects to the entrance and exit of the animation according to the type of effect.

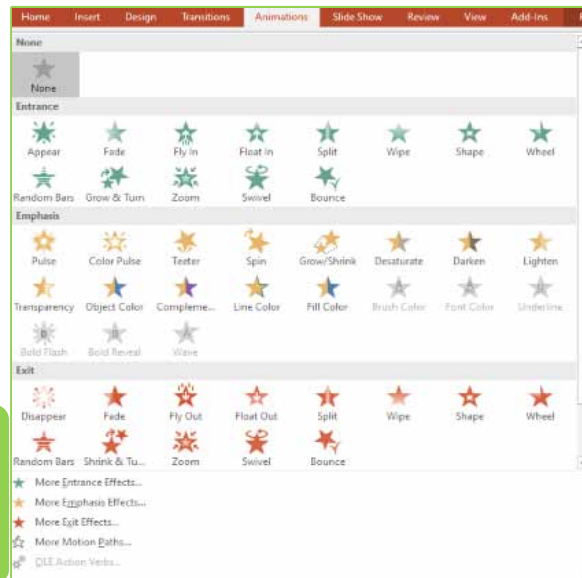


Figure 10-38: Animations Options

**3. Advanced Animations:** This group contains number of animations that enable us to add animation to the selected objects and then it will be considered as a new animation that can be added after adding the original animation from a group of animations and in the case of execution of another new animation it allows us to do so. Figure 10-39 shows all the options in this group.

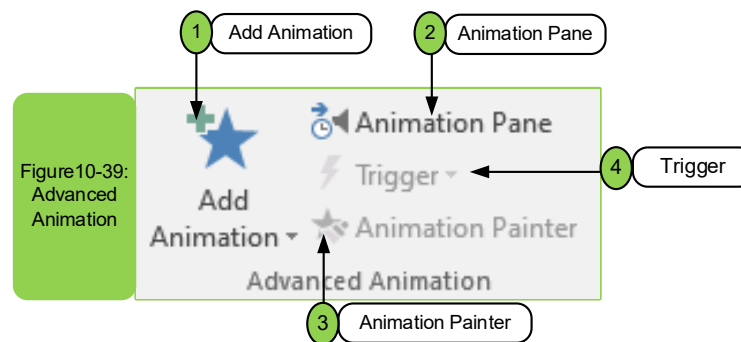



Figure 10-39: Advanced Animation

We find that after adding the animation we want from option (1), other options will be automatically activated and can be applied, such as option (2), which allows you to preview and edit the timing of the animation. We also find option (3) enables us to copy the animation to apply it to several objects through double-click on the Animation Painter and we can apply it using the shortcut (Alt + Shift + C). Finally, we find the fourth option that tells us how to apply the animation, when you click the mouse or on bookmark.



10 -11 Slide Show Tab

**Skill 10 - 9**  
How to Use the Groups included in Slide Show Tab



The Slideshow tab consists of several groups (or commands) such as Start Slide Show Group, the Setup Group, and the Monitors Group as shown in Figure10 -40. Also, some groups will have a small button in its lower right corner.

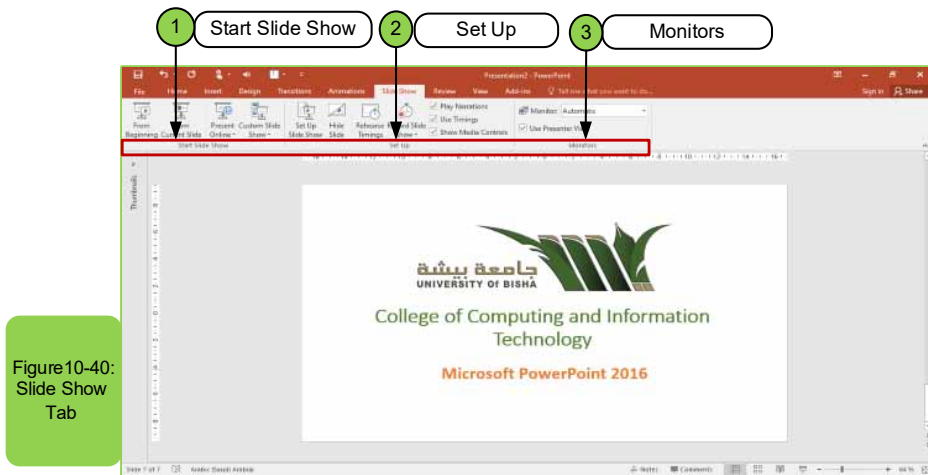


Figure10-40:  
Slide Show  
Tab

**1. Start Slide Show group:** It is the group through which several options can be performed on the slide as shown in Figure10 -41. Option (1) allows us to start the slide show from the first slide of the presentation, as we can also press the key (F5) on the keyboard or click on the figure (🖥️). In case of the need to start from the current slide that appears on the screen, we can choose option (2). As for option (3), we can perform the presentation via the Internet. To do so, you must have an account of Microsoft Office that allows others to see the slides in a web browser. As for the last option, if we need to show custom (selected) slides, we can choose option (4).

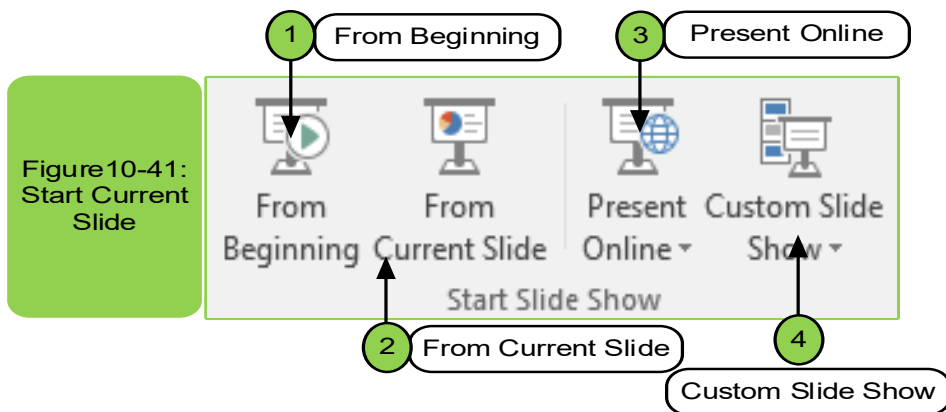


Figure10-41:  
Start Current  
Slide

**2. Set Up group:** It is the group through which several settings are applied on the slide as shown in Figure10 -42. We find that option (1) allows us to adjust setup for slides from advanced options that appear in slides.

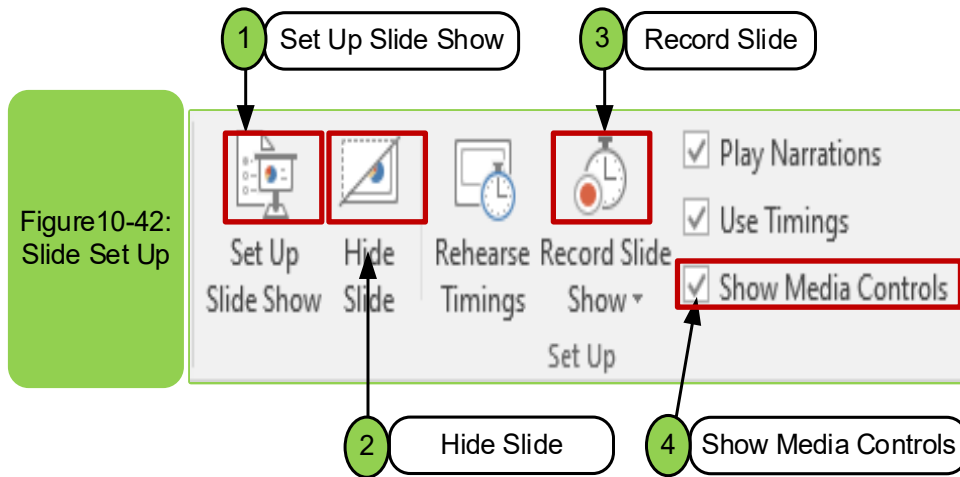


Figure10-42:  
Slide Set Up

When we press option (1) the screen appears to us as in Figure10- 43, which gives us several options for the show and upon completion of all the settings mentioned in the screen we can click OK to apply.

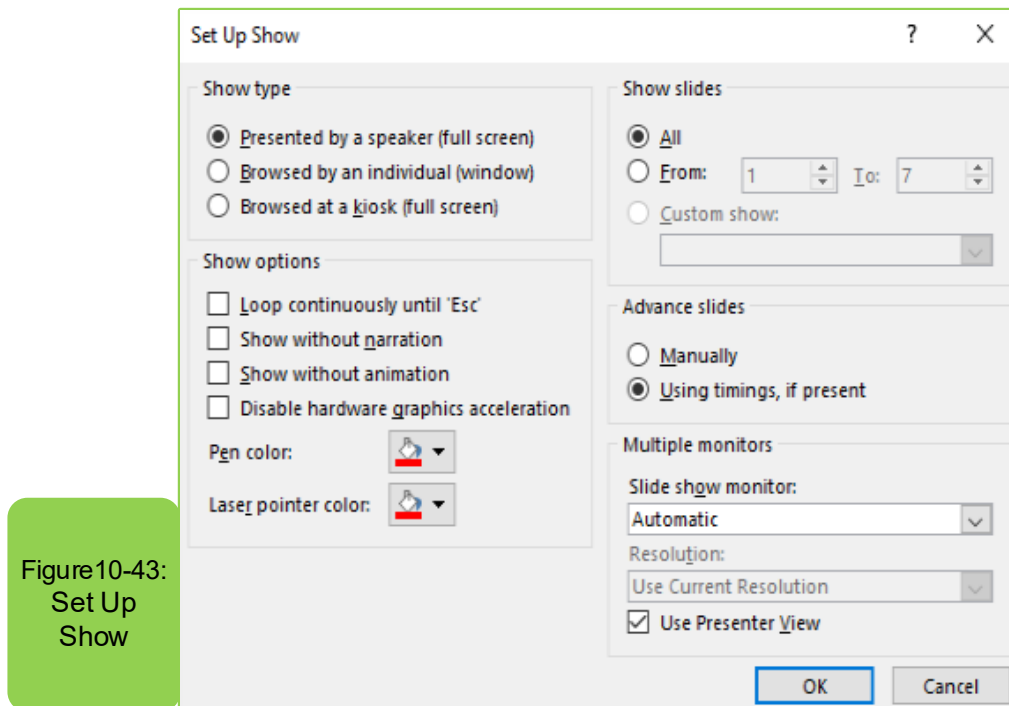
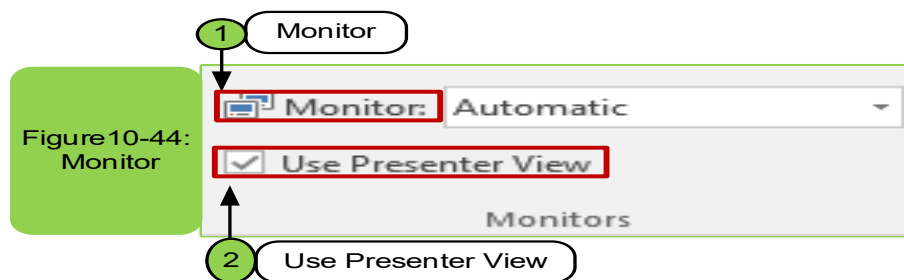


Figure10-43:  
Set Up  
Show

As for option (2) in Figure (10 -42), it enables us to hide specific slides from the presentation, and these slides we want to keep in the presentation and do not delete them. This is done only by selecting the slide and pressing the command Hide slide. Also, you can use this option during exercising the timing of the slide

show by recording the show time. As for option (3), it helps and allows us to record and show slides with audio narration and laser pointer, and it also allows us to start recording from the beginning or from a specific slide. As for option (4), it works to show the controls of the audio and video clip while moving over it during the show, we can also use playback show to run the audio narration and determine the play time for the animations and timings during the show.

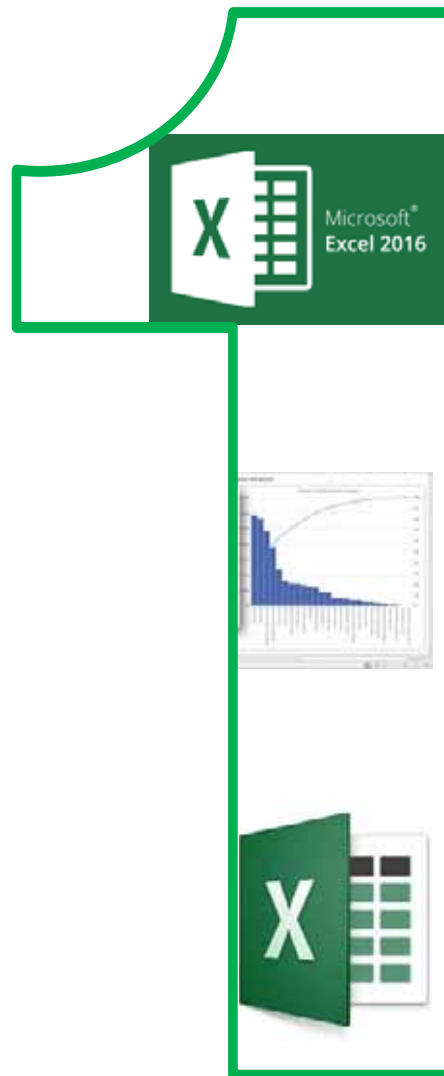
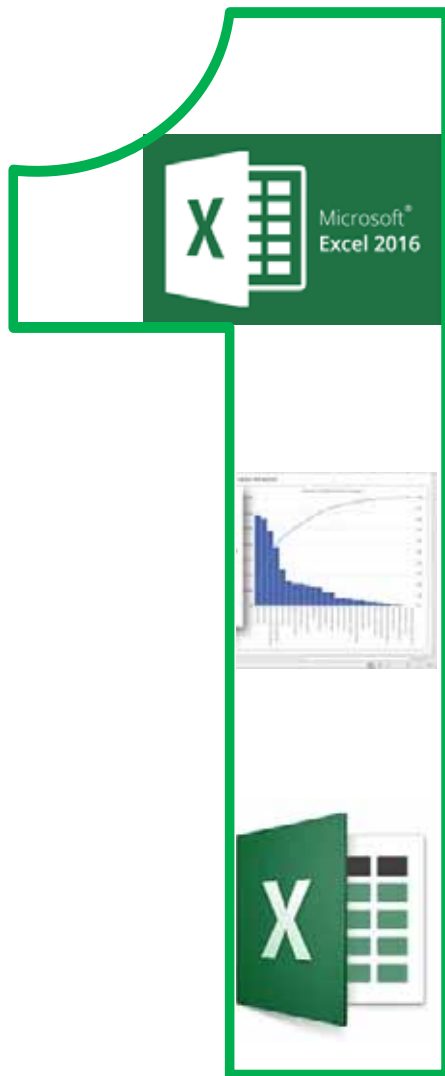
**3. The Monitors group:** This group has two options to be applied on the slide, as in Figure10 -44. In Option (1), the monitor allows us to automatically selection of the monitor or selection of a specific monitor. As for option (2), use presenter view, it allows us to show the slides in the full screen mode or the normal mode, or use the option (Alt + F5).





# Chapter 11

## Microsoft Excel







## Microsoft Excel

### Objectives

#### ➔ Main objectives:

1. Using the Excel worksheet program with high skill.

#### ➔ Secondary objectives

After studying this chapter, the student is expected to master the following knowledge and skills:

2. Learn how to insert data into cells.
3. Learn about keyboard utilizes on a sheet.
4. How to edit cell content.
5. How to find, replace and go to a specific location on the sheet.
6. Recognize ways to copy, move and delete cell contents
7. Learn how to sort cells in ascending or descending order
8. How to Freeze Panes.
9. How to use mathematical formulas and functions.
10. How to use arithmetic operations.
11. How to write formulas of arithmetic operations.
12. How to use the mathematical Functions Application.
13. Learn about ways to insert an image.
14. Learn to insert text.
15. Learn to insert automatic shapes.
16. Learn to insert chart.



### 11- 1 Introduction

In this chapter we will review number of skills that a student can learn to be able to use Microsoft Excel 2016 or what is known as the excel worksheet program, and all of these skills are only related to Microsoft Excel 2016. One of the most important things that the student must learn in this chapter is to know the new features of Microsoft Excel 2016, how to work with its interface, use and edit worksheets, and work with the document as a whole. It is also necessary to master dealing with various mathematical data and formulas, as well as dealing with objects, diagrams, and charts.

### 11 -2 Microsoft Excel

The Excel worksheet program (Microsoft Excel) is considered one of the Microsoft office programs, and it is specialized in creating Excel worksheets, as it provides a set of many features that makes the process of creating and editing excel worksheets and their display method is unique so that any user can apply it. Microsoft Excel 2016 is the 15th edition. It is also considered one of the effective programs in the electronic table, whereby it is possible to create, delete and edit cells so that they appear sequentially, automatically or interactively, with the addition of animations and sound effects accompanying the animation. Also, the Excel program used enables the user to share files with others. Also, it is possible to save editable file with Excel format, or an automatic display to run it without an Excel program on the computer. It also allows easy handling of graphs and faster.

### 11 -3 Design Features Using Excel

Many of us are looking to learn programs that help them organize mathematical data, and some even buy programs at expensive prices and sometimes, they discover that the program they bought does not fulfill the purpose. So, we find that sometimes Microsoft Office Excel package programs make you do not need to other computations programs.

#### *The most important features of Microsoft Office Excel 2016 are:*

- It is possible to calculate the income and expenses of a specific company efficiently.
- Analyze data and display the data to the user in the desired form.
- Create calculations that clarify the status of the institution or company.
- We do not need to go back to calculations once graphs have been created and data can be saved, arranged and restored at any time.



- The program works to reduce the time in calculations. Once a single cell is calculated, you can apply the first calculations to the rest of the cells by dragging the left mouse button and from the box in the rightmost corner, which gives speed in the calculations.
- The use of the program enables you to insert data that may take time to write down.
- The program manages the tables and we can copy and paste the cells efficiently.

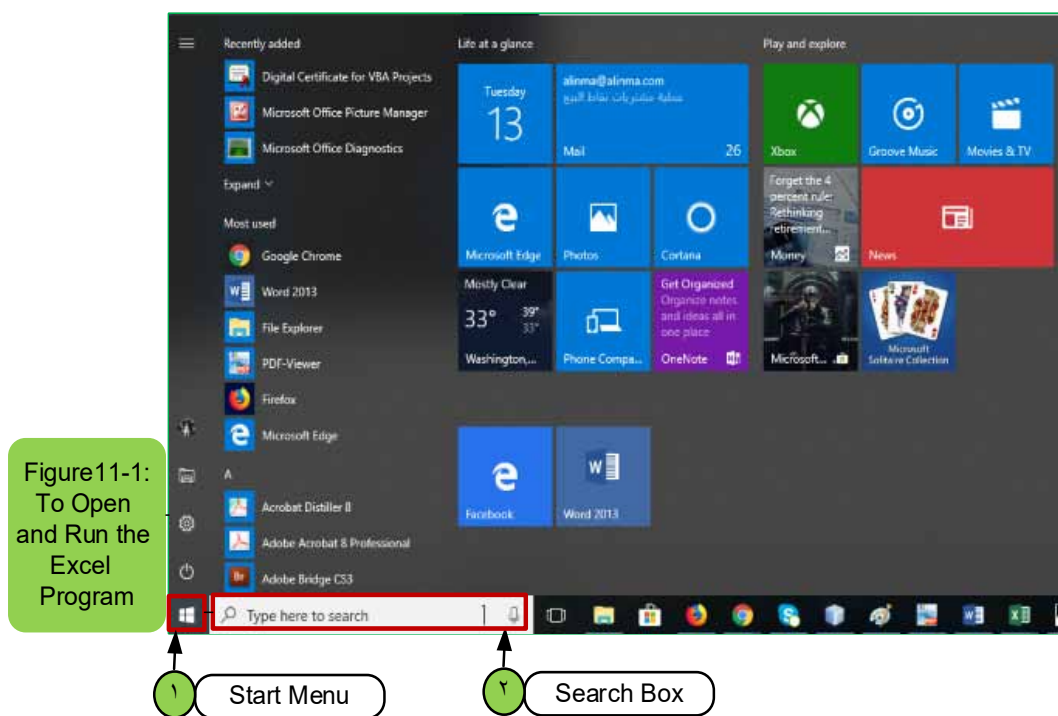
**Skill 11 - 1**  
Learn How to Create, Open and Close Excel worksheet Program



### 11 -4 Create, Open, and Close Excel Worksheet Program

*To open and run the Excel Worksheet program, follow these steps:*

- From the Windows 10 Start menu: Click the left mouse button on the Windows icon, as shown in Figure 11 -1.
  - Click on All Programs as in Figure 11- 1
  - Then enter the application software and search for Excel 2016
- By typing directly into the Excel 2016 search box and then pressing the left mouse button for Excel to open.



- Or from the desktop by pressing the right mouse button on a free space of the desktop and then choosing New then the Microsoft Excel Worksheet program or Excel.

After opening the Microsoft Excel program, the main program dialog box will appear as in Figure 11 -2, where it can create a new workbook file, use an existing Excel file, or use a ready workbook.

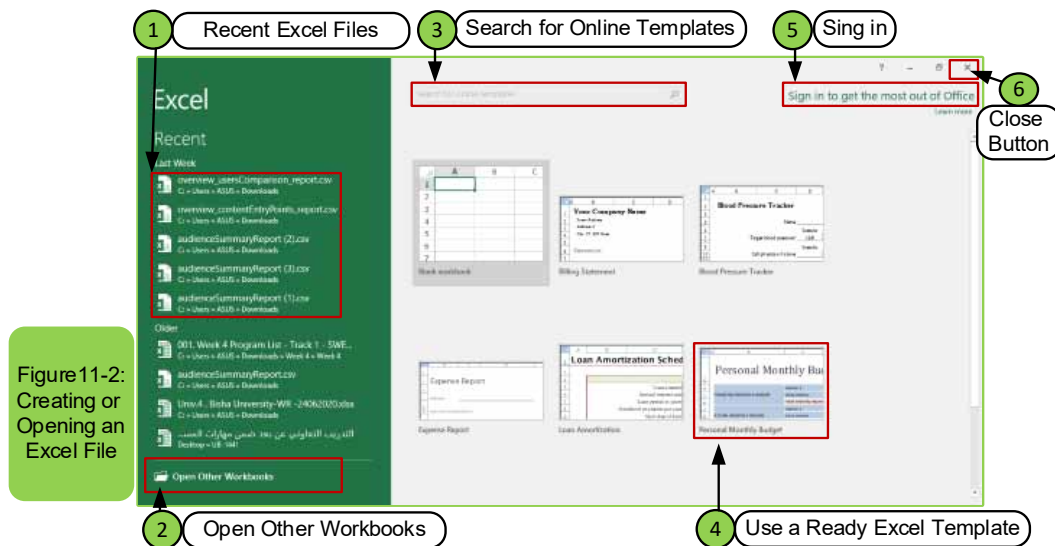


Figure 11-2:  
Creating or  
Opening an  
Excel File

## Skill 11 - 2

### Learning How to use the Main Interface of Microsoft Excel 2016

#### *The main user interface for Microsoft Excel 2016*

Before you start working with Microsoft Excel 2016 program, you must have the ability to know the main user interface for this program, and we find that once you open the Excel worksheet program (Excel) and choose the workbook, the figure 113- will appear. Also, the main user interface contains several tabs and inside each tab there are number of groups and inside each group there are number of options and the most used tabs in the Microsoft Excel 2016 program are:

- File tab
- Home tab
- Insert tab
- Page Layout tab
- Formulas tab
- Data tab
- Review tab
- View tab

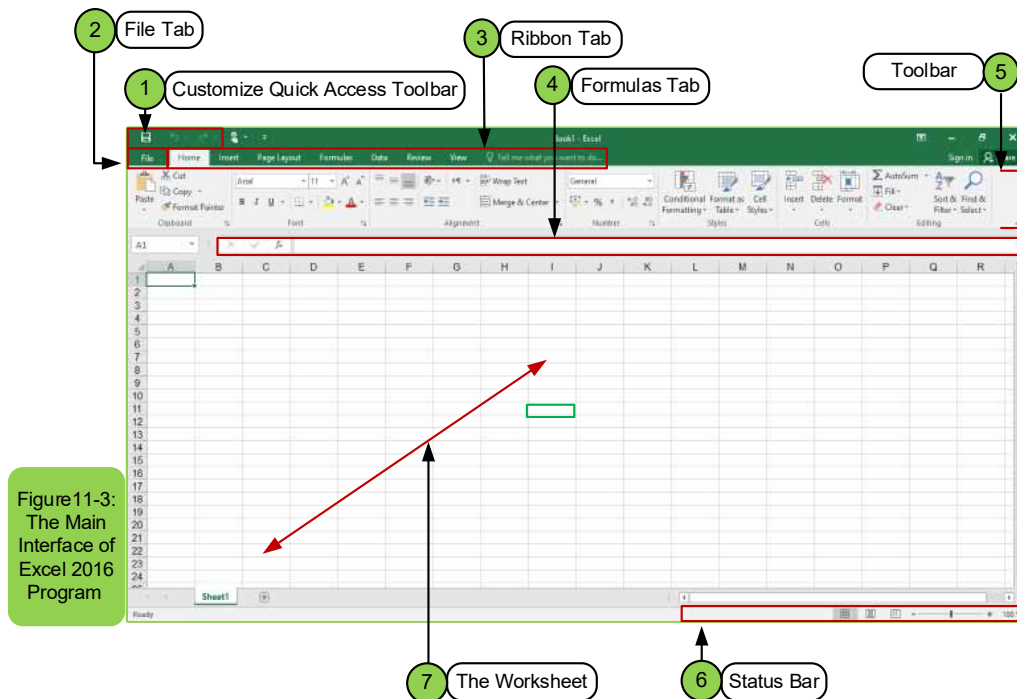


Figure 11-3:  
The Main  
Interface of  
Excel 2016  
Program

The main workbook of Excel worksheet after opening it contains several components as in Figure 11 -3, and we can mention:

1. **Customize Quick Access Toolbar:** The Quick Access Toolbar can appear above or below the bar. In order to change its location, click on the drop-down arrow to the right of the toolbar and click on (Show Below the Ribbon). Also, through this toolbar the user can open a new document or save or print a file and there are also other options inside it.
2. **File Tab:** it enables the user to open a new workbook, print, save a file, or open an existing file inside the computer or in one of the storage media.
3. **Ribbon Tab:** By default, in Microsoft Office Excel 2016 there are more than ten tabs (except for the File menu). Sometimes you will see editing tabs that appear when working on a special type of object.
4. **FormulasTab:** It is a bar next to the name box, in which the user can write the appropriate mathematical formula that he/she wishes to perform, and it also shows the content of the active cell.
5. **Toolbar:**It contains number of options that enables searching, replacing, selecting, editing, and others.
6. **Status Bar:** It is the bar through which the workbook screen is enlarged and minimized. Another option is to go to the view tab and choose the option zoom in or out according to what you need.

**7. The worksheet:** It is the region that consists of several rows and columns and their intersection with each other is called a “cell”, and the cell is activated by clicking on it as in the above figure and the active cell is surrounded by a green frame so we find from the figure above the H5 cell surrounded by the green frame and now we find the name H5 is obtained from that the letter H represents the column and the number 5 represents the row.

- The main user interface in the Excel program after opening allows us to create another new workbook by going to the "File" menu and clicking the left mouse button on the "New" option and then we choose "Blank workbook" or we can directly press the keys (Ctrl + N).
- To open an existing Excel file, we click on the “File” menu and click on the “Open” option. The options in Figure 114- appear to us, or we can press the keys (Ctrl + O).

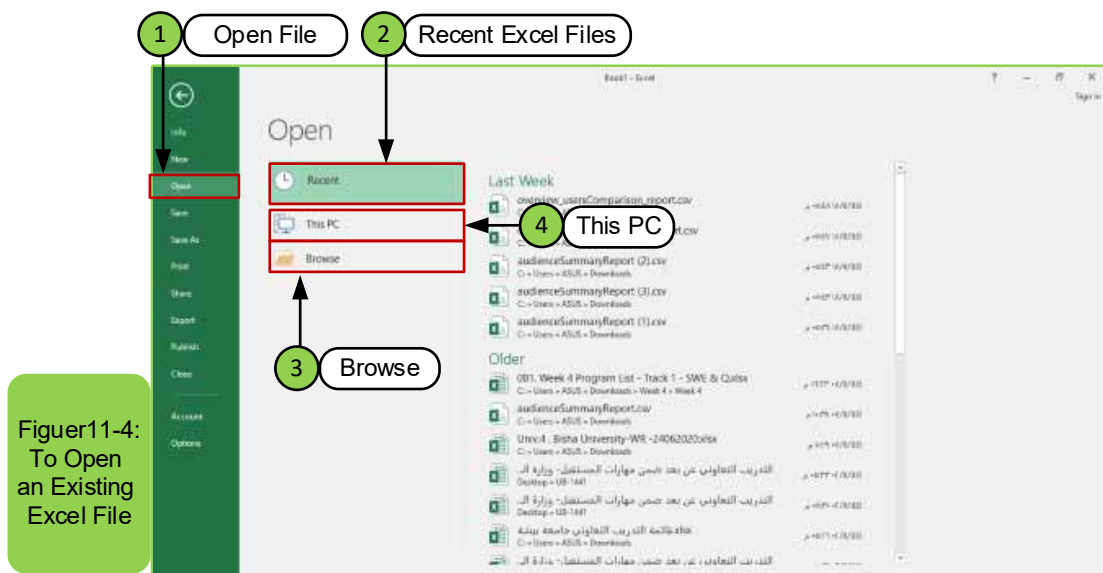
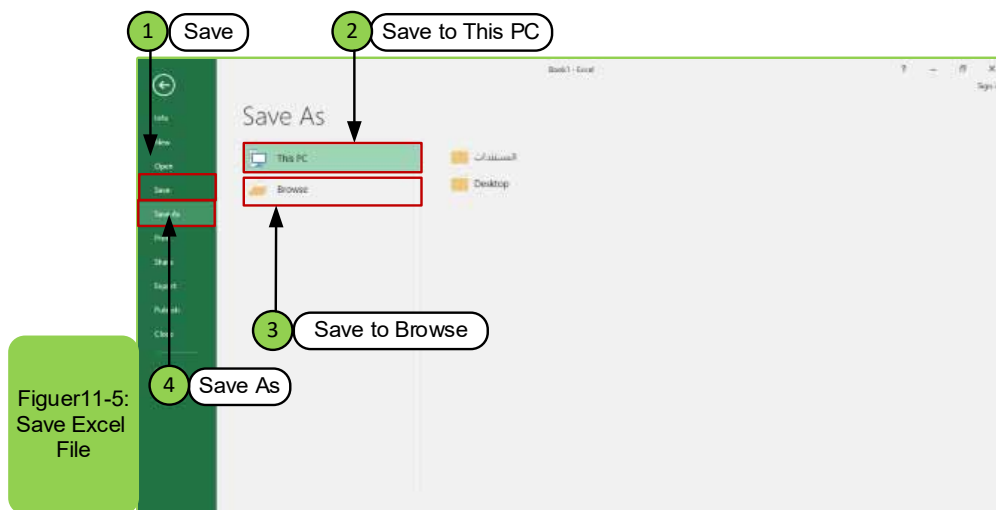


Figure 11-4:  
To Open  
an Existing  
Excel File

- To save a file for a new workbook in the Excel worksheet program, there are two methods, as in Figure 11 -5:
- 1. The first method “Save”:** Click on the “File” menu and choose the “Save” command, and this option is used to save a new workbook or in the case of saving the updating that was made to the opened workbook. We can also press Ctrl + S to perform the command directly.
  - 2. The second method “Save As”:** allows us to save a new copy or save another copy of the workbook while keeping the original.



Figuer11-5:  
Save Excel  
File

- To close the excel worksheet program, click the left mouse button on the "X" icon in the top right of the open window, which closes the file or by using the shutdown keys (Alt + F4).

### Skill 11 - 3

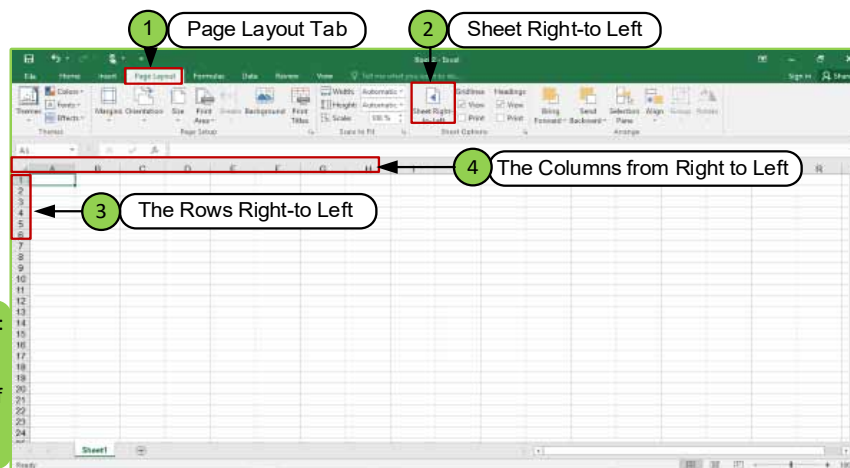
Recognizing How to Change the Direction of the Worksheet from right to left or vice versa



### 11 -6 Changing the Direction of Worksheet in Excel Program

We find that when a new workbook is opened in the Excel program, the worksheet direction will be from left to right, this means that the rows and columns will be from left to right, so the following helps the worksheet's users in the English language. In the case of the need that changes the direction of the worksheet from right to left so that users of the Arabic language can apply it as in Figure116-, we follow the following:

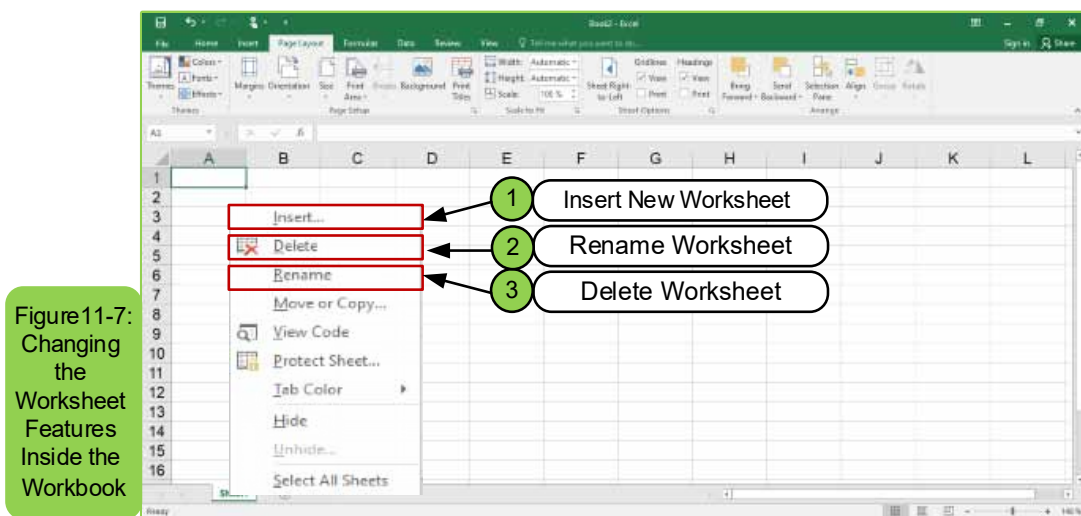
- Go that "page layout" tab
- Click on the "Right to Left Sheet" option to change the direction of the worksheet from right to left.




Figuer11-6:  
Changing  
the  
Direction of  
an Excel  
Workbook

### 11 -7 Changing the worksheet features inside the workbook

We find that when opening a new workbook at the beginning, it contains one worksheet called “Sheet1”, so the Excel program allows us to change the name of the sheet to the name we want, add other worksheets, or delete worksheets and this is done as the following we stand at the “Sheet 1” option below The worksheet then we press the right mouse button, and a drop-down menu appears containing several options and we choose from it the option that we want to apply as in Figure 11- 7.



**Skill 11 - 4**  
Recognizing How to Deal with Cells, Rows and Columns



### 11 -8 Dealing with Cells, Rows and Columns

As we mentioned earlier, the intersection of any Column with Row gives a Cell. In this section, we will know the following as in Figure 11 -8:

- How to select (select) a cell and this is done only by clicking with the left mouse button on the cell we want.
- How to select number of adjacent cells, by clicking the left mouse button on the first cell and then dragging the mouse pointer to the last cell and then the cells have been selected. We find that the mouse pointer is pulled in the direction of the row. This means that we have pulled cells that are adjacent to a row. As for pulling the pointer in the direction of the column, this means that we have selected vertical adjacent cells.
- Also we can select row and vertical adjacent cells at the same time by selecting the first cell and pressing the "Shift" key on the keyboard and

dragging the mouse pointer at the same time and then clicking on the last cell with the left button of the mouse.

- As for the need to select spread out cells, we press the "Ctrl" key and then at the same time choose the cells that you want to select by clicking on the left mouse button in the cell you wish to choose.

**Note:** To insert text or number into the cell, this is done by selecting the cell in which we want to insert the text or number by clicking on it with the mouse, and then we write the text or number directly as in Figure118- and we can move through the cells using the arrows on the keyboard.

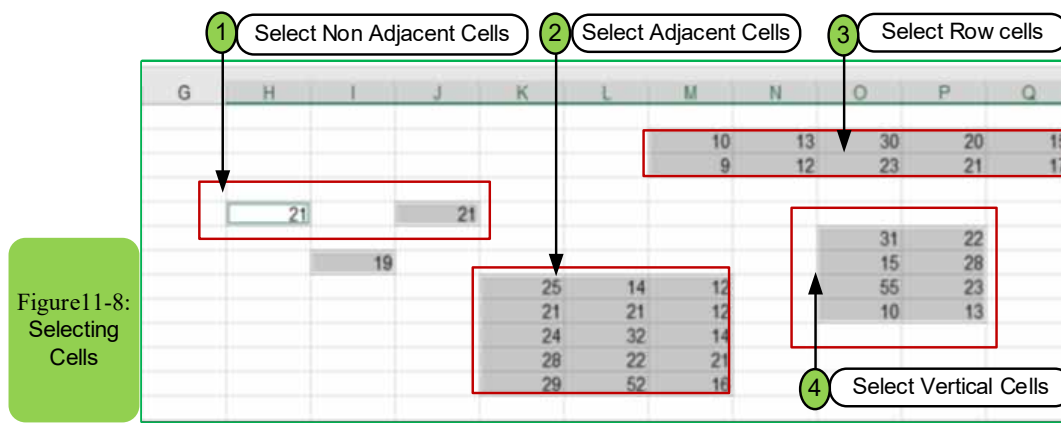


Figure11-8:  
Selecting  
Cells

### Skill 11 - 5 Recognizing How to Delete Cells, Rows, Columns and Worksheets



#### 11- 8 -1 Delete Cells, Rows, Columns and Worksheets

Sometimes the user of excel worksheet program may need to delete a row, column, or worksheet, or he may need to move some cells to the right or to the left, or from top to bottom or vice versa. To apply these commands, the following steps can be followed:

- Determine the cell or cells to be deleted by left-click.
- From the "Home" tab, click on the "Delete" icon at the top of the sheet, as in Figure 11- 9, and then several options for deletion appear.

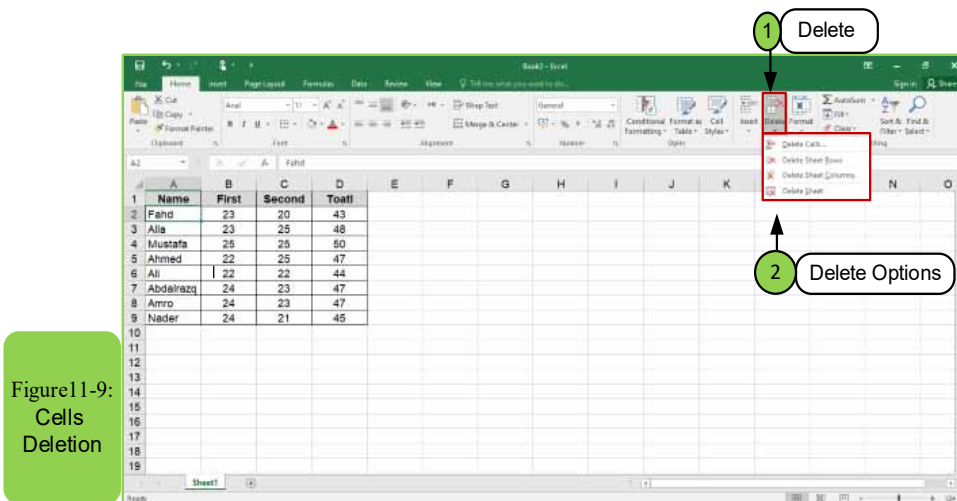


Figure11-9:  
Cells  
Deletion

- When you click on the "Delete" option, four options will appear, namely, delete cells - delete sheet rows - delete sheet columns - delete sheet:
- In the case of clicking on the "Delete Cells" option after selecting the cells, the dialog box appears as in Figure 11 -10 which has four applicable options and when choosing any of them press "OK" to apply.

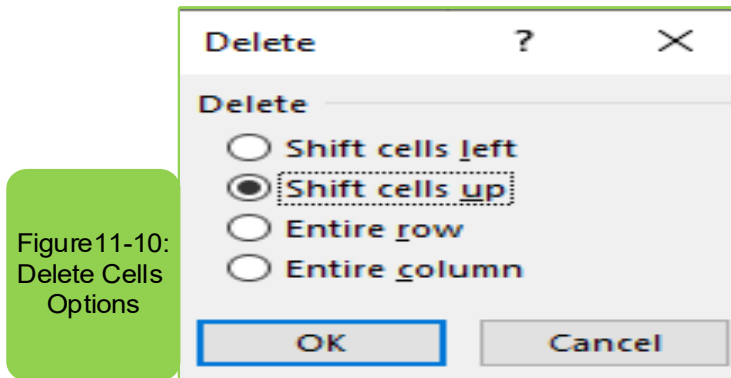


Figure11-10:  
Delete Cells  
Options

- If you press the "Delete Sheet Rows" option inside the "Delete" option located on the "Home" tab, the selected rows will be deleted automatically.
- If you press the "Delete Sheet Columns" option inside the "Delete" option located on the "Home" tab, the selected columns will be deleted automatically.

**Note:** There is another way in which you can delete rows, columns, or cells by:

- Determine the rows, columns, or cells you want to delete directly.
- Clicking the right mouse button and choosing "Delete" from the menu that appears as in Figure 11- 11.



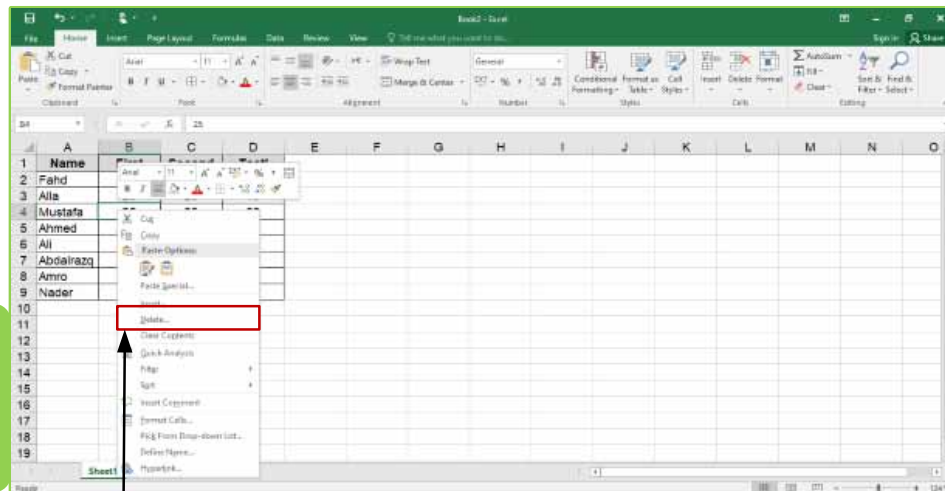


Figure 11-11:  
Delete from  
Drop Menu

1 Delete

- We find that the last option in the "Delete" menu is "Delete a sheet". If you click on the "Delete a sheet" option, as in Figure 119-, you will see a message explaining that to delete the current worksheet, the workbook must contain more than one worksheet. The deletion cannot take place if there is only one worksheet as in Figure 11- 12.

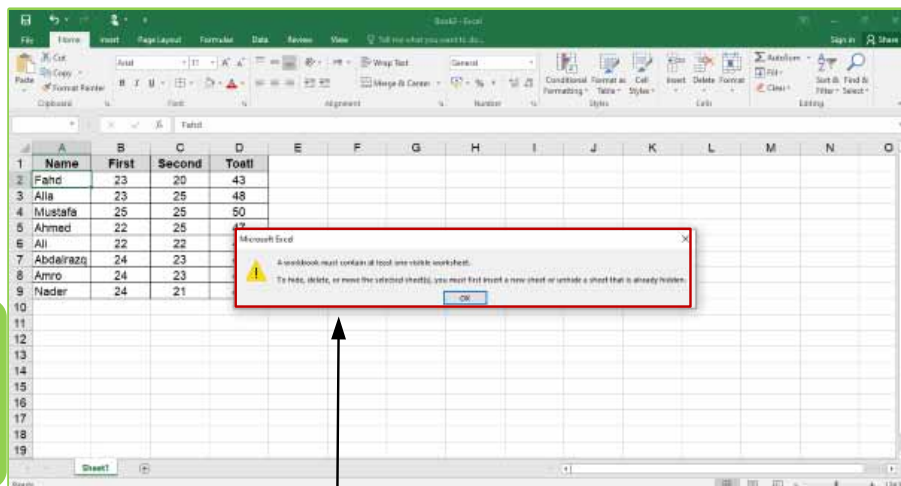


Figure 11-12:  
A Sheet  
Deletion  
Message

1 A Sheet Deletion Message

### Skill 11 - 6 Recognizing How to Insert Cells, Rows, Columns and Worksheets



#### 11 -8- 2 Insert Cells, Rows, Columns and Worksheets

Sometimes user of the Excel worksheet program may need to insert a row, column, or worksheet into the currently open workbook. In this case, the user must follow the following steps:

- Select the cell or cells to insert cells before or after by clicking with the left mouse button.
- From the "Home" tab, we click on the "Insert" icon at the top of the sheet as in Figure 11- 13-A, so several options for insert will appear as soon as we choose any of the four options.
- The selected option will be performed directly.

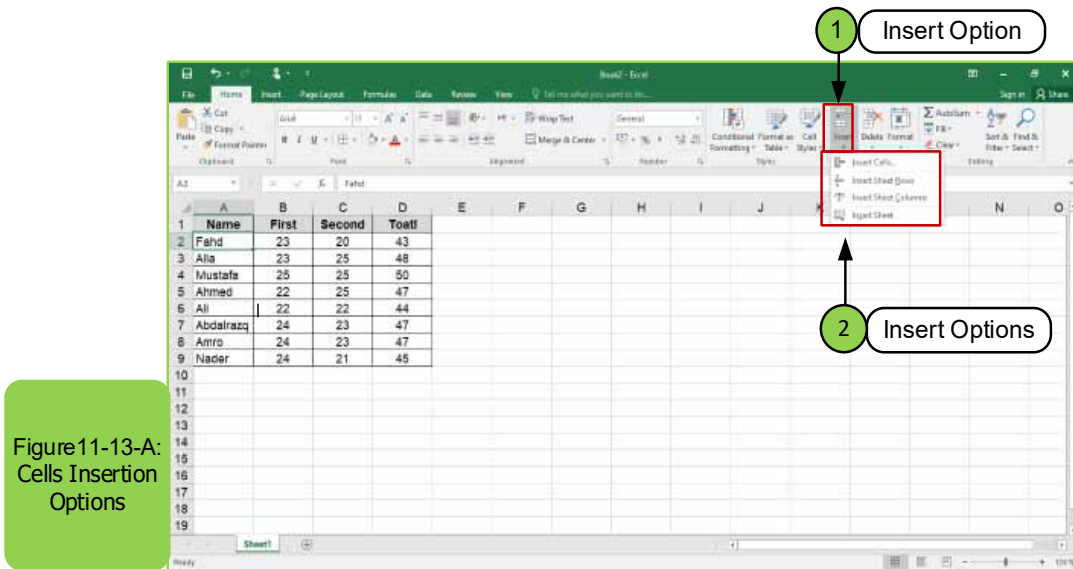


Figure 11-13-A:  
Cells Insertion  
Options

**Note:** There is another way in which you can insert rows, columns, or cells by:

- Determine the rows, columns, or cells you want to insert directly.
- Click the right mouse button and choose "Insert" from the menu that appears as in Figure 11- 13-B.

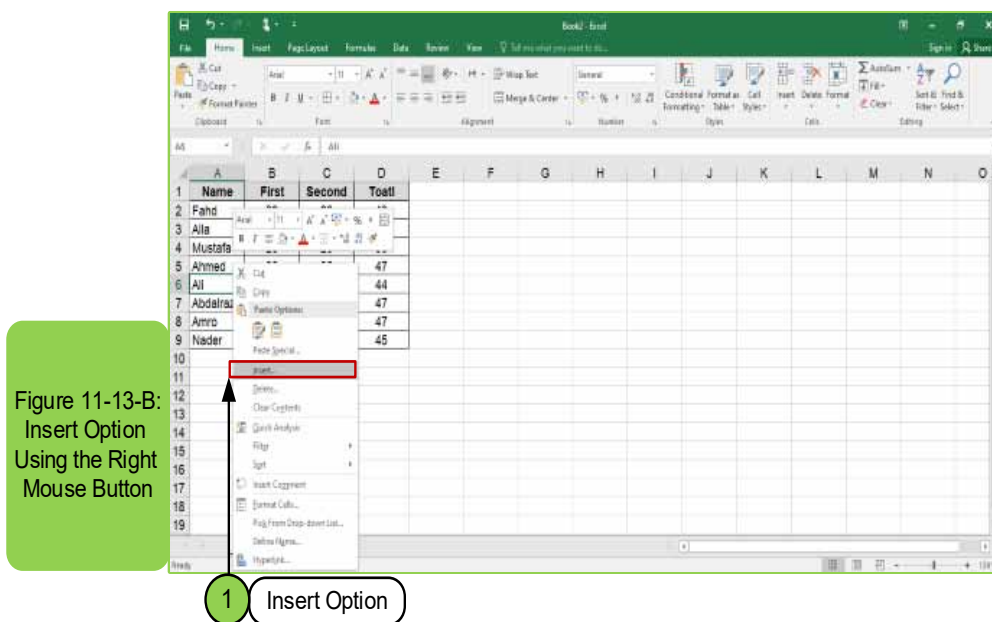


Figure 11-13-B:  
Insert Option  
Using the Right  
Mouse Button

## Skill 11 - 7 Recognizing How to Change the Sheet Name



### 11 -8 -3 Change the Sheet Name

Sometimes the user of the Excel worksheet program may need to change the name of the sheet to another alternative name, and this is done through one of two options:

- 1. The first option:** by double-clicking on the name of the sheet whose name we want to change then we write the new name and press Enter.
- 2. The second option:** we right-click on the name of the sheet whose name we want to change and then a menu appears containing several options we choose the option "rename" and then we change the name and click Enter as in Figure 11 -14 or click the left mouse button to complete the editing.

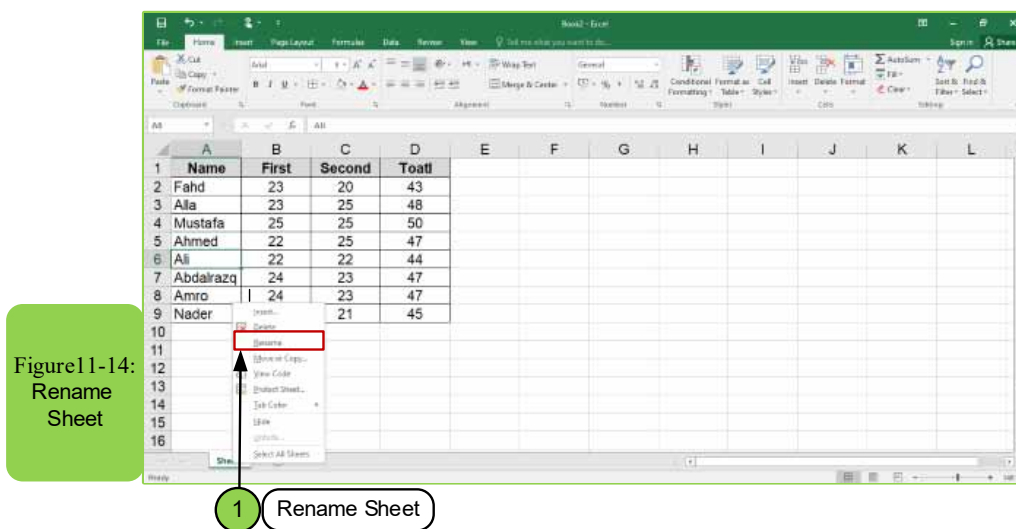


Figure 11-14:  
Rename Sheet

1 Rename Sheet

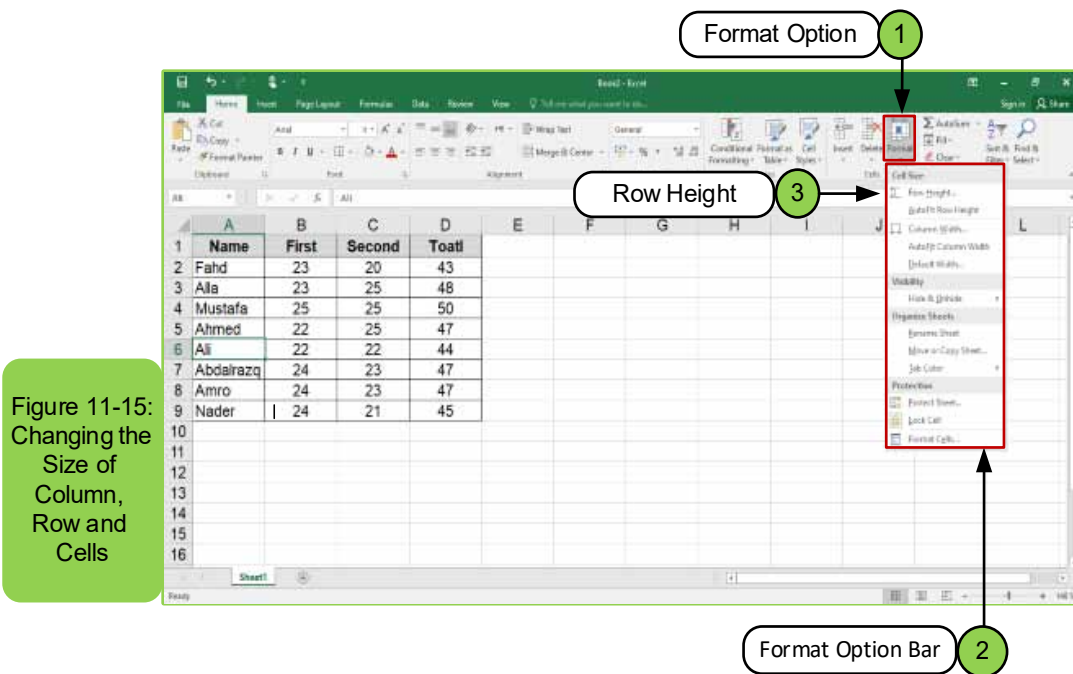
## Skill 11 - 8 Recognizing How to Change the Size of Column and Row



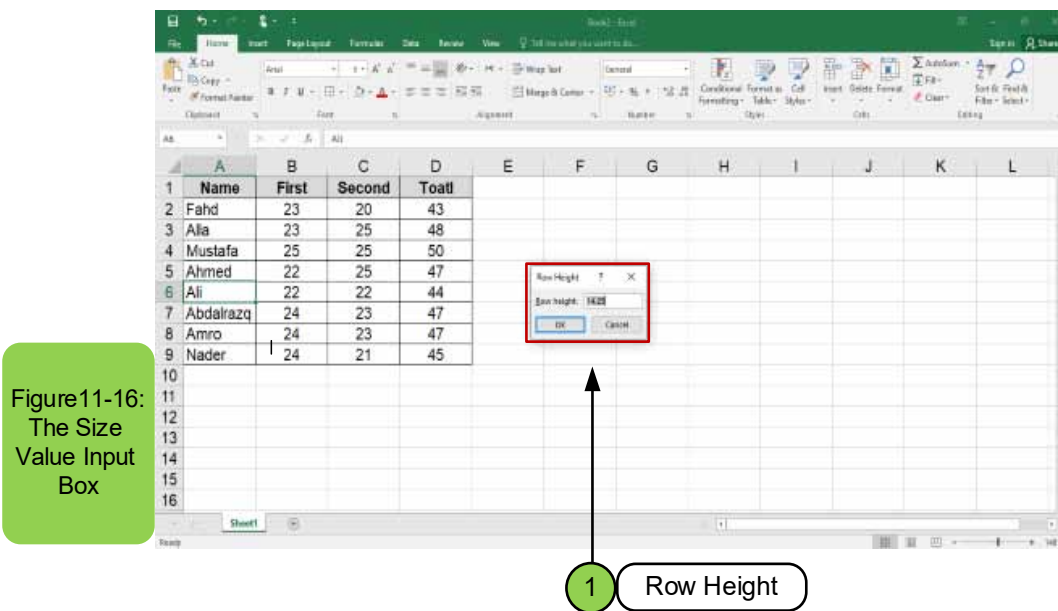
### 11- 8 -4 Adjusting the Size of Column and Rows

Sometimes the user of the Excel worksheet program may need to change the size of a specific row or rows and enables him to adjust the size of a specific column or columns by the following:

- We click on the row, column, or cell we want to resize.
- From the "Home" tab, we click on the "Format" option at the top of the screen, and the menu appears to us as in Figure 11 -15.



- **To change the size of the row,** we choose from the list that appeared when clicking on the “Format” option, the option “Row height” as in Figure (11- 15). A box will appear to us, as in Figure 1116-, through which we specify the size that we want to give then we press the “OK” button to apply.



- **To change the size of the column,** we choose from the list that appeared when clicking on the “Format” option, the option “Column width” as in Figure 11- 17. A box appears to us through which we specify the size that we want to give, then we press the “OK” button to apply.

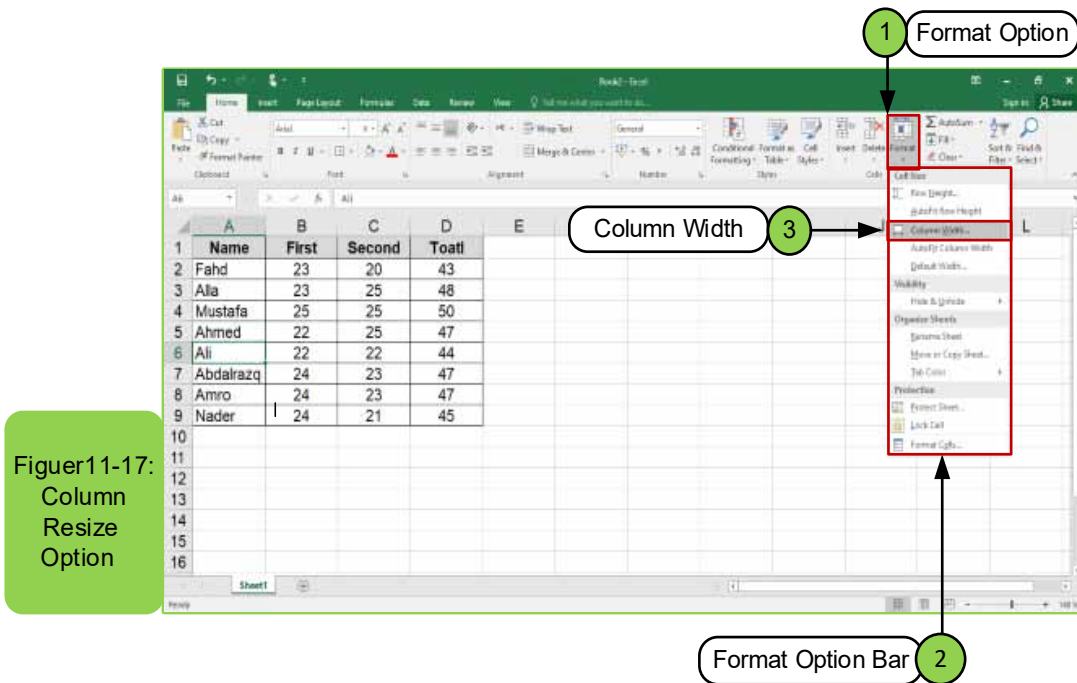


Figure 11-17:  
Column  
Resize  
Option

**Note:** There is another way in which you can adjust the size of the rows or columns as follows:

- Determine which rows or columns we want to enlarge or reduce.
- We click on the left mouse button at the beginning of the row or column and then drag according to the desired size as in Figure 11- 18.

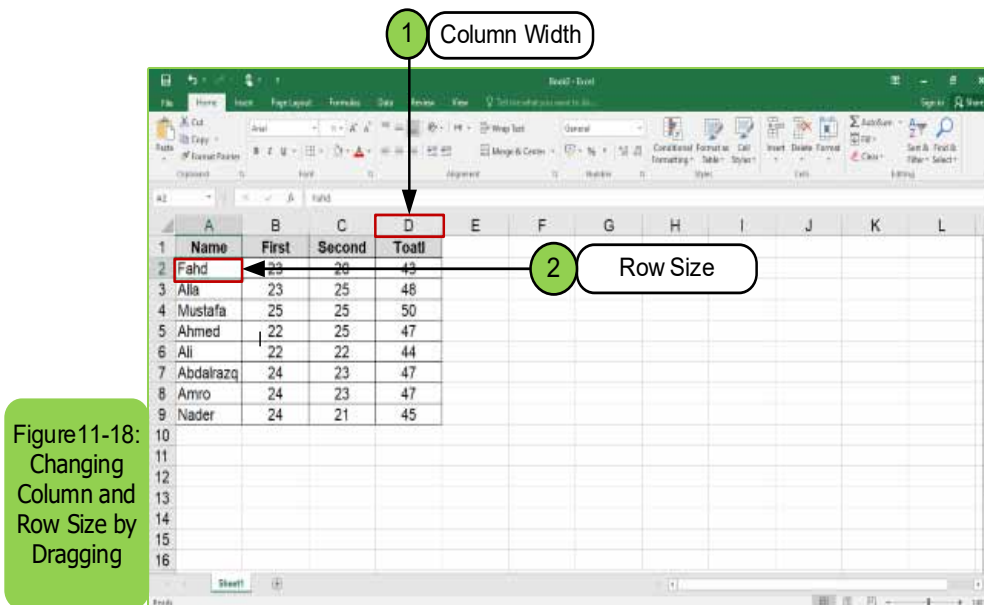


Figure 11-18:  
Changing  
Column and  
Row Size by  
Dragging

**Skill 11 - 9**  
Insertion of Cell Data



**11 -9 Insertion of Cell Data**

Data for each of (numbers, texts, dates) can be inserted into cells - as in Figure 11- 19 - by the following steps:

- To select the cell to be written on: Click the left mouse button on it or use the keyboard to access it.
- Write the text, number, or date directly in the box. The date is usually written in the form of (day / month / year).
- Press Enter to fix the data and move to the next cell.

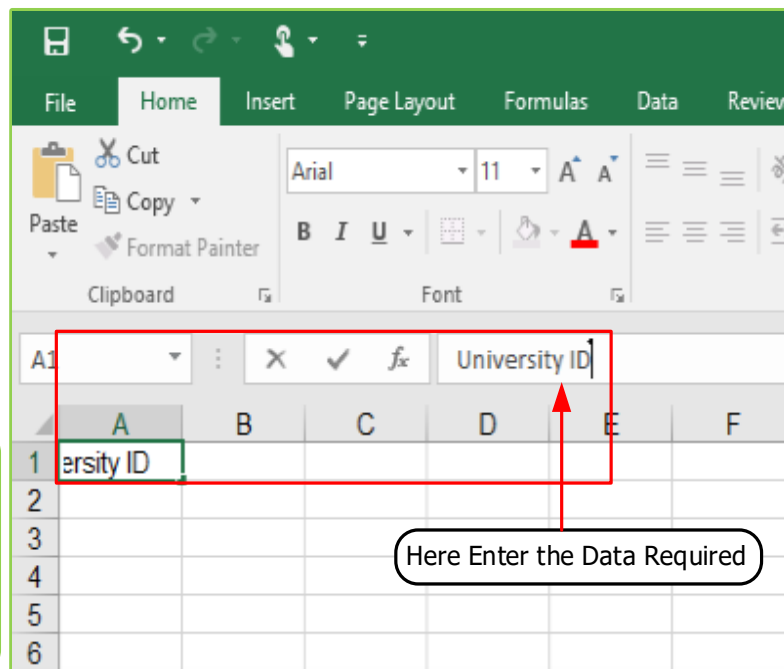


Figure 11-19:  
Entering Data  
into Cells

**For example, to insert the following data:**

University ID	First Name	Last Name	Specialization
1017891	Mohammad	Khaled	Computer Science
1027892	Moustafa	Majid	Information Technology
1037893	Ali	Othman	Information Technology

**Follow the following steps:**

- Click on cell A1 and then it will select.
- Type the phrase (university ID) using the keyboard.
- Click on cell B1 and type (first name).
- Click on cell C1 and type (last name).
- Click cell D1 and type (specialization).
- Click on cell A2 and type (1017891).
- Click on cell B2 and type (Mohammad).
- Click on cell C2, and type (Khaled).
- Click on cell D2, and type (Computer Science).
- Repeat the previous steps to fill in the rest of the table as in Figure11 -20.

	A	B	C	D
1	University ID	First Name	Last Name	Specialization
2	1017891	Mohamed	Khalid	Computer Science
3	1017892	Ahmed	Nader	Information Technology
4	1017893	Osman	Ahmed	Information Technology

Figure11-20:  
Cell Data  
Entry Form

**11 -9- 1 The use of the keyboard on a worksheet:**

- To move to a new row below the current row press (Enter)
- To move to a new column to the left of the current press (Tab)
- To delete a cell’s content: Select the cell’s content by clicking on it and then clicking (Delete).
- To go to the beginning of the line / row, press (Ctrl + Home)
- To move to the end of the line / row, press (Ctrl + End)
- To move to the beginning of the worksheet, press (Ctrl + Home)
- To view the rows down, click (Ctrl+Page Down)
- To view the rows up click (Ctrl+Page Up)
- To undo any error, press (Ctrl + Z)
- To return to the undone, press (Ctrl + Y)

### 11 -9 -2 General rules for inserting the data

- From the figure, note that one element was inserted in cell A1 as a number only and also for cell B1, and it is preferable to insert data in cells in this way; because this later allows us to perform sorting operations easily for the first name only or for the date modified and the contents of cells (A1, B1, C1, and D1) are called from field or column headings.
- If you want to insert new data, insert it in the fourth row directly, and do not leave blank rows between the data because this may cause future errors when performing the data sorting, as well as for the columns.
- If you determine the sum of the numerical data for a column, for example, it is preferable to leave a blank row before the row in which the sum will be inserted.
- To insert a specific number, select the cell and type the number directly in it. A negative sign can be inserted in front of the number if the number is negative.
- Use the slash (/) or the hyphen (-) to separate the components of date. To enter the current date in a specific cell, press (Ctrl + ;) on the keyboard.
- To insert the current time, press (Ctrl + :), i.e. (Ctrl+ Shift + ;) on the keyboard.

### Skill 11 - 10 Recognizing How to Edit the Cell Content



### 11 -9- 3 Editing the Cell Content

*To edit the cell contents with (add, delete, replace), follow these steps:*

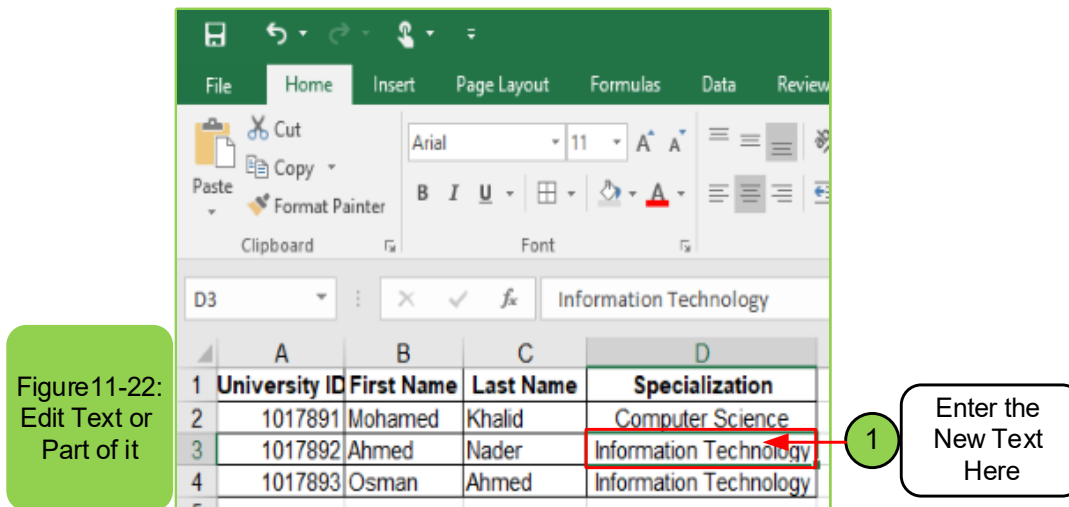
- Click on the cell whose content you want to edit, for example cell (D3) as shown in Figure 11 -21.

Figure 11-21: Modifying Cell Data

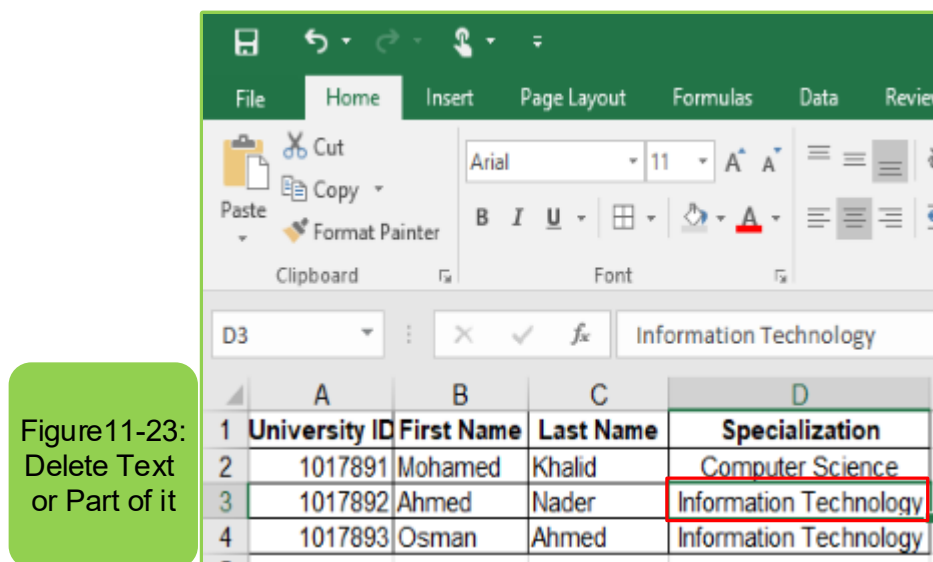
	A	B	C	D
1	University ID	First Name	Last Name	Specialization
2	1017891	Mohamed	Khalid	Computer Science
3	1017892	Ahmed	Nader	Information Technology
4	1017893	Osman	Ahmed	Information Technology



- **To add data:** Move the pointer to the addition site, then start adding (text or number ...) you want to add directly.
- **To edit the text (or part of it):** Select the text to be replaced by highlighting it with the mouse, insert the new text directly as shown in Figure 11- 22.



- **To delete the text (or part of it):** Select the text to be deleted by highlighting it with the mouse, press the “Delete” key as shown in Figure 11- 23.



- **To copy or Paste the text:** Select the text to be replaced by highlighting it with the mouse, press (Ctrl + C) to copy or (Ctrl + X) to cut, then go to the second cell site and press (Ctrl + V) to paste as shown in Figure 11-24.

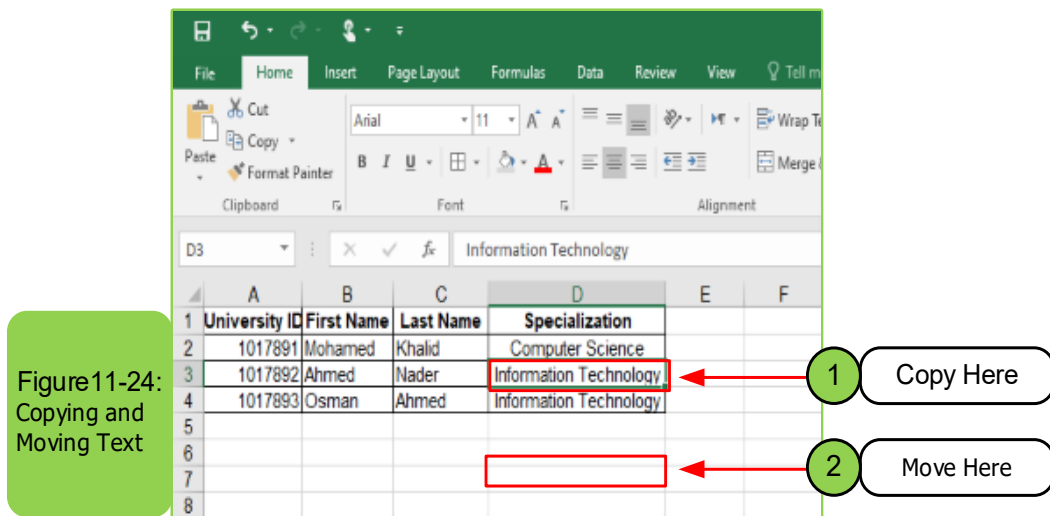


Figure 11-24:  
Copying and  
Moving Text

## Skill 11 - 11

### Recognizing How to Find, Replace and Go to

#### 11 -10 Find, Replace and Go to

##### 11 -10 -1 Find

*Excel worksheet program enables you to search for text or number contained within the texts of worksheet cells, to search follow the following steps:*

- Within the tab (Home) and from the group (Editing), click on the (Find and Select) icon and the Find and Replace dialog box appears, or press (Ctrl + F) on the keyboard, so that the Find dialog box appears directly as shown in the Figure 11 -25.

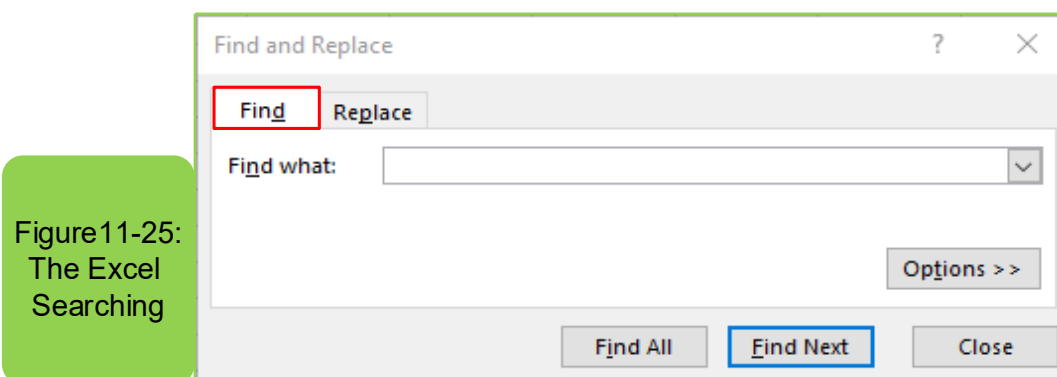


Figure 11-25:  
The Excel  
Searching

- Find and Replace dialog box, select the (Find and Select) command, and the find dialog box appears.
- In the (Find what) edit box, type the data you want to search for such as (.....) as in Figure (11- 25)

- Click the (Find Next) button and note that the pointer moves directly to the first position of data on the worksheet.
- Repeat clicking the (Find Next) button, and the pointer will move to other places that contain the data as shown in Figure1126-.
- Click the (Close) button to close the (Find and Replace) dialog box.

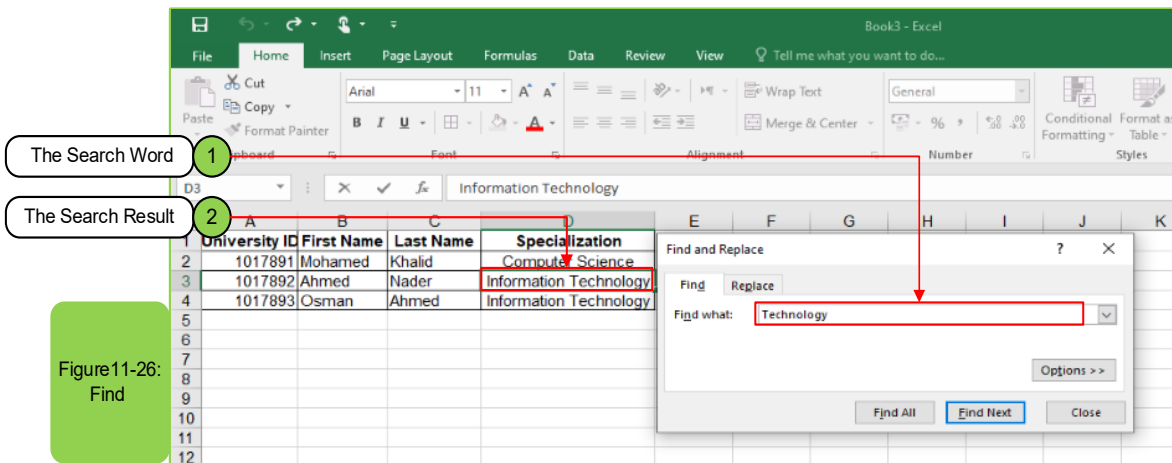


Figure 11-26:  
Find

### 11 -10- 2 Replace

The excel worksheet program enables you to replace the value with a new value on the worksheet. To make the replacement, follow these steps:

- Apply step (1) above in the find process.
- Click on the (Replace) tab instead of (Find).
- Perform step (2) by typing the value you are looking for and the replaced value.
- Click the Replace button to replace the value in its location, or (Replace All) to replace all the contents of the worksheet similar to the replaced value as shown in Figure11 -27.
- Click the (Close) button to fix the replacement, then close the dialog box.

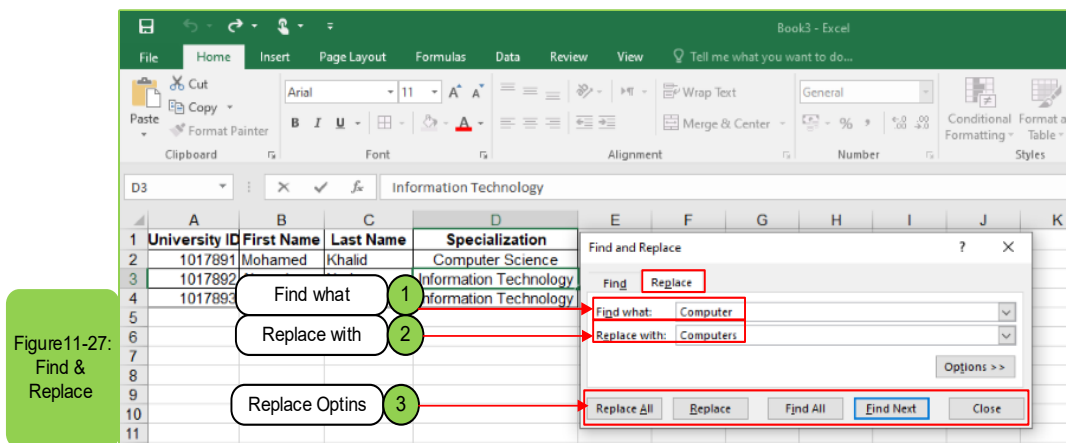


Figure 11-27:  
Find &  
Replace

### 11 -10 -3 Go to

The (Go to) command is used to quickly reach cells, columns, or rows, rather than searching and moving between columns and rows to reach the desired one.

#### To move to a specific cell, follow these steps:

- On the (Home) tab and in the (Edit) group, click the (Find and Select) icon and then click (Go To) or press (Ctrl + G) to show the (Go to) Dialog box or press the (F5).
- Type in the cell number required to go to, for example (D1), then click the OK button.
- You will immediately go to the desired cell.
- To return to the beginning of the worksheet you can follow the same previous steps and insert the cell name (A1), or press (Ctrl + Home) as shown in the Figure11- 28.

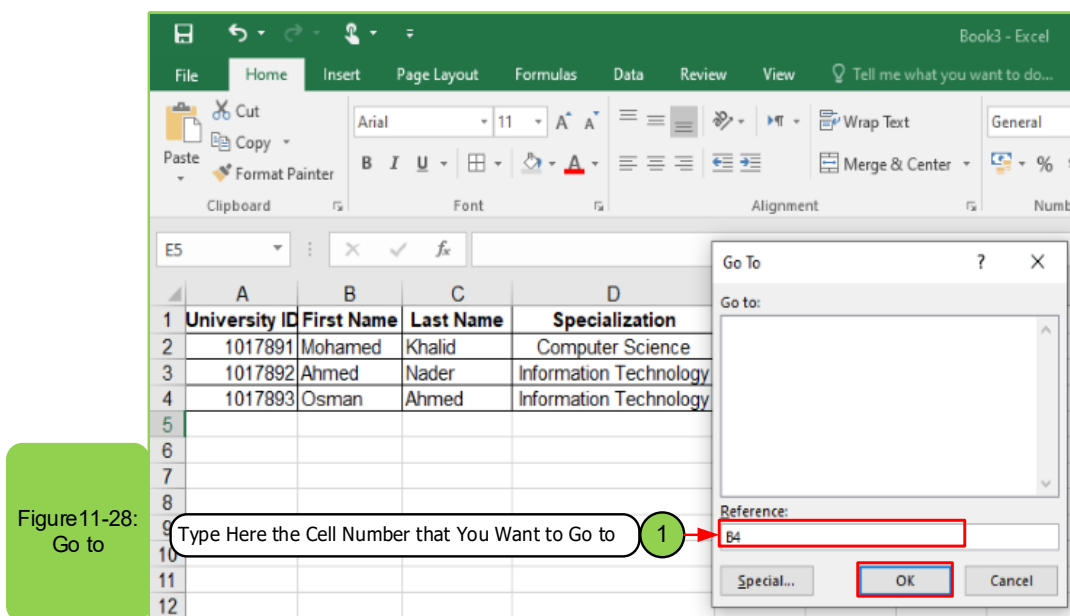


Figure11-28:  
Go to

Type Here the Cell Number that You Want to Go to

### Skill 11 - 12

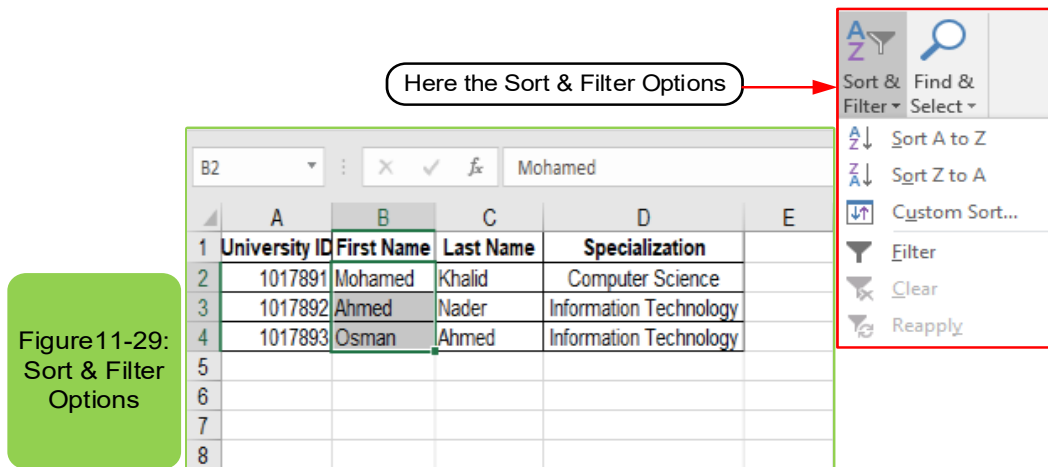
Recognize the Sorting of Cells ascendingly or descendingly



### 11 -11 Sorting cells ascendingly or descendingly

The excel worksheet program enables you to sort the data of columns either ascendingly or descendingly, either alphabetically (A..Z) or digitally (9..0) by following the following steps:

- Select the cells of the column to sort the data on (with necessary to not highlighting the headers of the columns).
- To sort: Click on the “Sort” button in the “Edit” group of the “Home” bar, to display a set of options as shown in Figure 11 -29.



- **For Ascending Sorting:** Click on the (Ascending Order) option.
- **For Descending Sorting:** Click (Descending Order).

To sort all the contents of the rows according to the order of the values (ascending / descending) in the required column as shown in Figure 11 -30.

### Skill 11 - 13

#### Recognizing the Freeze Panes

### 11- 12 Freezing Panes

The word “freezing” means fixing number of cells so that they do not move or disappear from the user’s sight even if the sheet is moved up and down, as well as to the left or right, and the process (freezing) can be carried out by following the following steps:

- Click on the cell you want to freeze the panes starting from it.
- Click the (Freeze Panes) button within the (window) group of the (View) tab to give options (Freeze Top Row, Freeze First Column, Freeze Panes)as shown in Figure1130-.

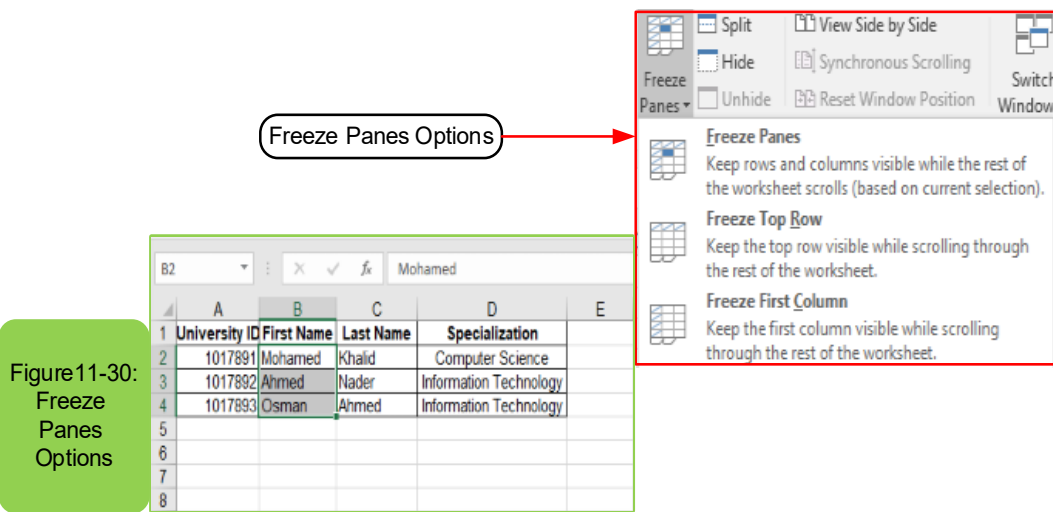


Figure 11-30:  
Freeze  
Pan  
Options

- Click the (Freeze Panes) button to divide the worksheet into four sections from the (Freeze) cell and fix the top cells from the left side of the worksheet.
- To apply: Perform the previous steps, then move the worksheet down and right, as the frozen cells will remain present whatever you move.
- To remove the freeze: Repeat the steps (11 -12) with the option of (unfreeze the panes) as shown in Figure 11 -31.

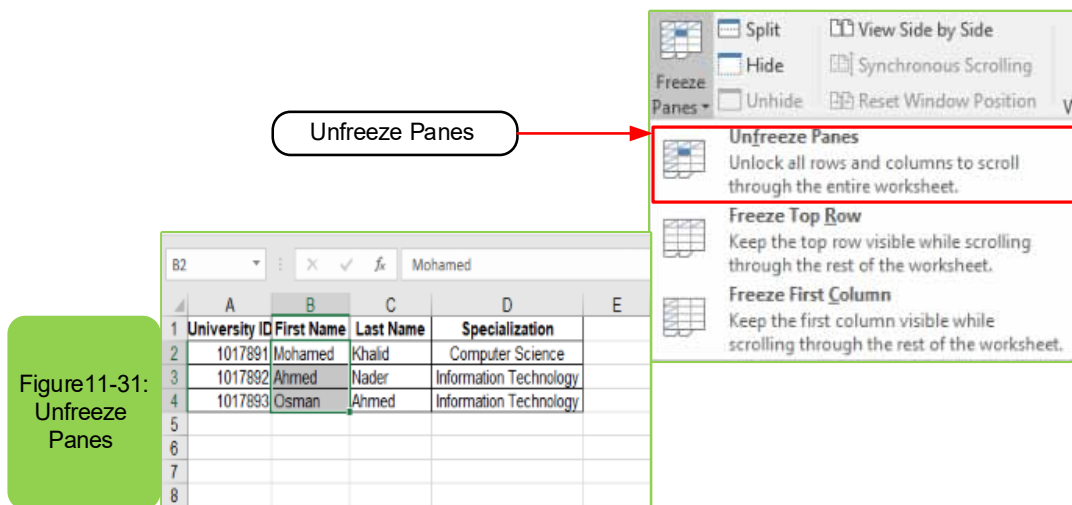


Figure 11-31:  
Unfreeze  
Pan  
es

## Skill 11 - 14

### Recognizing The Matimatical Formulas and Functions

#### 11- 13 The Mathimatical Formulas and Functions

One of the most important features of Excel is the ability to use mathematical formulas, through which different arithmetic operations are performed on the values in worksheet cells. The program also contains large library of different

functions divided into categories, including financial, statistical, engineering, mathematical, trigonometrical, and other functions, to perform various operations on the values in worksheet cells. In this part, you will learn how to use formulas and functions in worksheets.

### Skill 11 - 15 Recognizing The Arithmetic Operations



#### 11 -13 -1 The Arithmetic Operations

The formula is an equation in which arithmetic operations are performed on the values in worksheet cells, such as arithmetic and logical operations, which range from simple arithmetic operations (multiplication, division, addition, subtraction) to more complex operations like (mathematical functions), the following explains how to deal with these operations.

#### First: Succession of the Arithmetic Operations

Excel uses the known succession to perform arithmetic operations, that is:

1. Braces first, from inside to outside.
2. The power.
3. Multiplication and division from left to right.
4. Finally, addition and subtraction from left to right.

#### Second: Addition and subtraction of cell contents

- Click on the cell in which you want the result to appear in it, and then type the sign (=) as in the Figure 11 -32.

Figure 11-32: The Formula

	A	B	C	D
1	<b>Employee Name</b>	<b>Basic Salary</b>	<b>Bonuses</b>	<b>Toatl</b>
2	Mohamed Khair	1050	200	=
3	Monzir Faiz	1300	400	
4	Mogtaba Faiz	970	150	
5	Mohamed Rabee	1200	450	
6				
7				

The Cell to which the Result Appears 1

- Click on the first cell of the cells involved in the addition or subtraction process, and note that it will be outlined with dashed line after clicking and the name of the cell will also appear in the resulting cell, as shown in Figure 11 -33.

	A	B	C	D
1	<b>Employee Name</b>	<b>Basic Salary</b>	<b>Bonuses</b>	<b>Toatl</b>
2	Mohamed Khair	1050	200	=C2
3	Monzir Faiz	1300	400	
4	Mogtaba Faiz	970	150	
5	Mohamed Rabee	1200	450	

Cells Involved with Addition and Subtraction Operations 1

Figure 11-33:  
Select a Cell

- Write the sign (+ / -) after the cell name in the resulting cell as shown in the Figure 11-34.

	A	B	C	D
1	<b>Employee Name</b>	<b>Basic Salary</b>	<b>Bonuses</b>	<b>Toatl</b>
2	Mohamed Khair	1050	200	=C2
3	Monzir Faiz	1300	400	
4	Mogtaba Faiz	970	150	
5	Mohamed Rabee	1200	450	
6				
7				

Figure 11-34:  
Writing the  
Formula

- Click on the second cell that involved in the addition or subtraction process and note that it will be outlined with a dashed line after clicking and the name of the cell will also appear in the resulting cell as in Figure 11-35.

	A	B	C	D
1	<b>Employee Name</b>	<b>Basic Salary</b>	<b>Bonuses</b>	<b>Toatl</b>
2	Mohamed Khair	1050	200	=B2:C2
3	Monzir Faiz	1300	400	
4	Mogtaba Faiz	970	150	
5	Mohamed Rabee	1200	450	
6				
7				

Figure 11-35:  
Writing the  
Second Cell

- Press (Enter) to see the result directly on the result cell.
- To insert other cell values, repeat points (2 and 3) depending on the number of cells involved in the process.



### Skill 11 - 16

#### Recognizing How to Fill the Arithmetic Operations



#### Third: Filling the Arithmetic Operations

The excel worksheet program enables you to get benefit from automatic copying of the arithmetic operations on a specific cell to the adjacent cells by applying the (fill) command used in filling the formats and texts; as in Figures 11-36 and 11 -37, and this is done by following the following steps:

- Click on a cell containing the result of arithmetic or logical operation.
- Set the mouse pointer to the small, dark square on the lower right corner (+) of the cell.

Figures 11-36:  
Filling the  
Arithmetic  
Operations

	A	B	C	D
1	<b>Employee Name</b>	<b>Basic Salary</b>	<b>Bonuses</b>	<b>Toatl</b>
2	Mohamed Khair	1050	200	1250
3	Monzir Faiz	1300	400	
4	Mogtaba Faiz	970	150	
5	Mohamed Rabee	1200	450	
6				
7				

- Then start dragging to the side (columns / rows) that the operation will be performed on and parallel to the work cells in the main arithmetic operation.

Figures11-37:  
Filling the  
Arithmetic  
Operations

	A	B	C	D
1	<b>Employee Name</b>	<b>Basic Salary</b>	<b>Bonuses</b>	<b>Toatl</b>
2	Mohamed Khair	1050	200	1250
3	Monzir Faiz	1300	400	1700
4	Mogtaba Faiz	970	150	1120
5	Mohamed Rabee	1200	450	1650
6				
7				

- The values of the arithmetic operation are immediately filled over all the highlighted areas.


**Skill 11 - 17**  
Recognizing How to Apply the Mathematical Functions



**11 -13 -2 Applying the Mathematical Functions**

The function is a formula that was previously written in the program, and that leads to one of the arithmetic or logical operations. Excel has a large library of different functions, and the following is an explanation of some of the common functions in the program, and the function of each of them.

**Skill 11 - 18**  
Knowing the Calculation of the Average Function



**First: Calculation of the Average Function:**

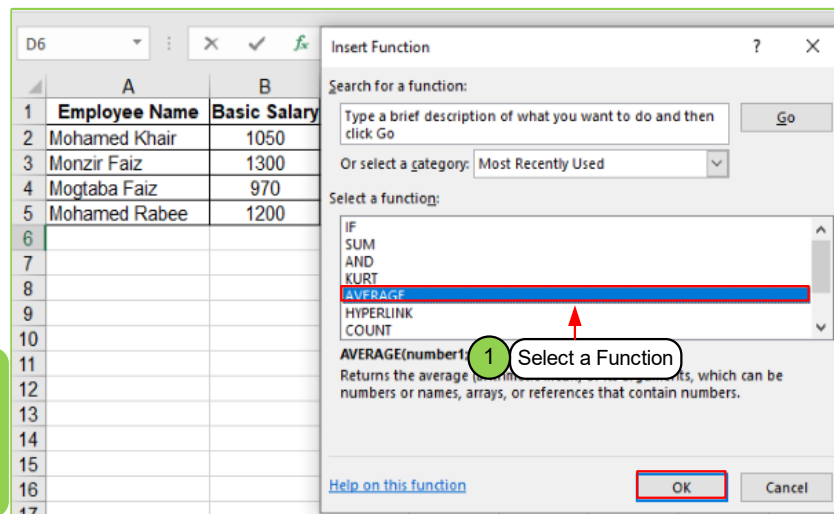
The Average: the sum of the values divided by the number of values. To apply the average function, we follow the following steps:

- Click on the cell in which you want to show its result. as in Figure 11 -38.

Figures11-38:  
The  
Average  
Function

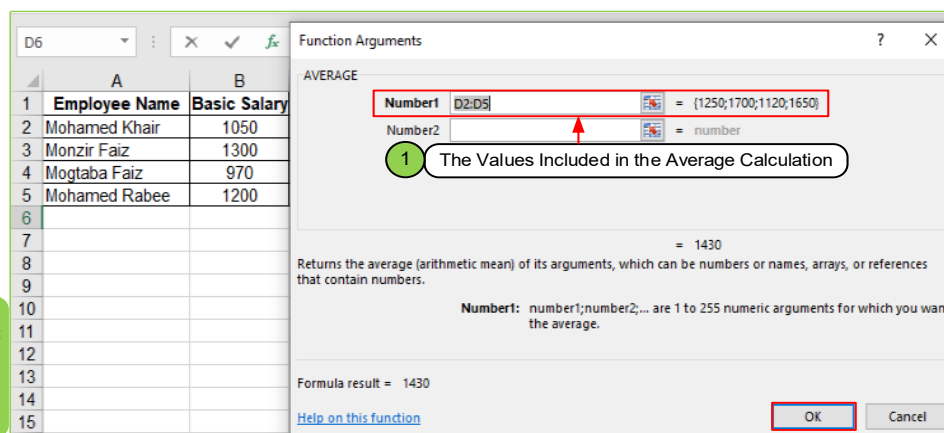
	A	B	C	D
1	<b>Employee Name</b>	<b>Basic Salary</b>	<b>Bonuses</b>	<b>Toatl</b>
2	Mohamed Khair	1050	200	1250
3	Monzir Faiz	1300	400	
4	Mogtaba Faiz	970	150	
5	Mohamed Rabee	1200	450	
6			Average	
7				

- Click the function button (FX) on the (Formula tab), and the insert function dialog box appears directly.
- Click on (Average) and then click (OK), to immediately show the dialog box for selecting cells whose average value should be calculated as in the Figure 11 -39.



Figures11-39:  
The  
Average  
Function

- Drag directly with the mouse on the values involved in the average calculation and they appear as shown in the values box (D2: D5)
- Click (OK), to display the value on the location chosen in Step (1).



Figures11-40:  
The  
Average  
Function

- You can use (fill) in the rest of the cells using the previously explained filling method.

	A	B	C	D
1	<b>Employee Name</b>	<b>Basic Salary</b>	<b>Bonuses</b>	<b>Toatl</b>
2	Mohamed Khair	1050	200	1250
3	Monzir Faiz	1300	400	1700
4	Mogtaba Faiz	970	150	1120
5	Mohamed Rabee	1200	450	1650
6			Average	1430
7				

Figures11-41:  
The  
Average  
Function

### Skill 11 - 19

#### Knowing the Calculation of the Min and Max Functions



#### Second: Calculation of the Min and Max Functions

**Max:** A function used to determine the highest value among a group of cells selected from a worksheet.

**Min:** A function used to determine the lowest value among a group of cells selected from a worksheet.

#### It is calculated by the following steps:

- Click on the cell in which you want to show its result.

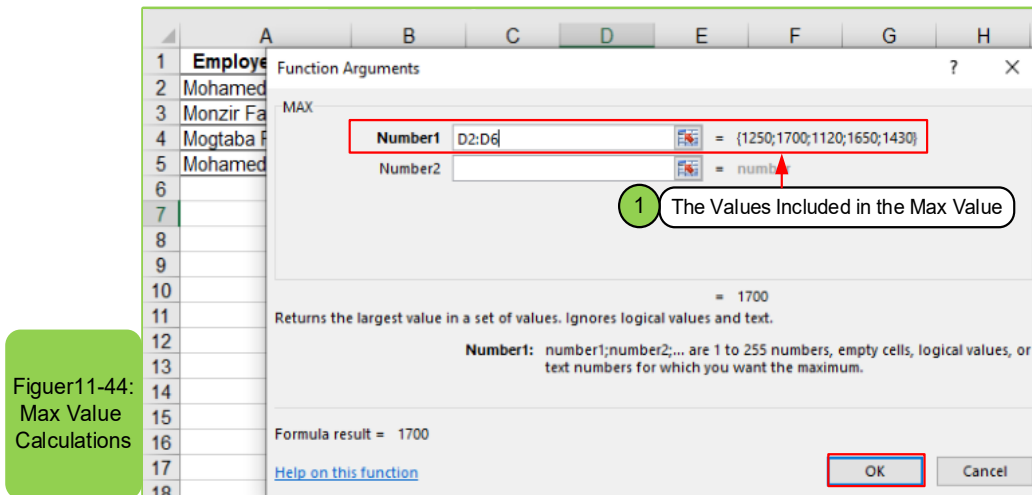
Figuer11-42:  
Max Value  
Calculations

	A	B	C	D
1	<b>Employee Name</b>	<b>Basic Salary</b>	<b>Bonuses</b>	<b>Toatl</b>
2	Mohamed Khair	1050	200	1250
3	Monzir Faiz	1300	400	1700
4	Mogtaba Faiz	970	150	1120
5	Mohamed Rabee	1200	450	1650
6			Average	1430
7			Max Value	

- Click on the function button (FX) on the (formula) tab, and the insert function dialog box appears directly.
- Click on the (Max) or (Min) option, then click (OK), to immediately show the dialog box for selecting cells to determine its lowest or highest value.

Figuer11-43:  
Max Value  
Calculations

- Drag directly with the mouse on the values involved in the Min or Max calculations and they appear as follows on the values box (D2: D6).



Figuer11-44:  
Max Value  
Calculations

- Click (OK), so that the value appears on the location chosen in Step (1).

	A	B	C	D
1	<b>Employee Name</b>	<b>Basic Salary</b>	<b>Bonuses</b>	<b>Toatl</b>
2	Mohamed Khair	1050	200	1250
3	Monzir Faiz	1300	400	1700
4	Mogtaba Faiz	970	150	1120
5	Mohamed Rabee	1200	450	1650
6			Average	1430
7			Max Value	1700
8				

Figuer11-45:  
Max Value  
Calculations

### Skill 11 - 20

Kowing the Calculation of the Sum Function



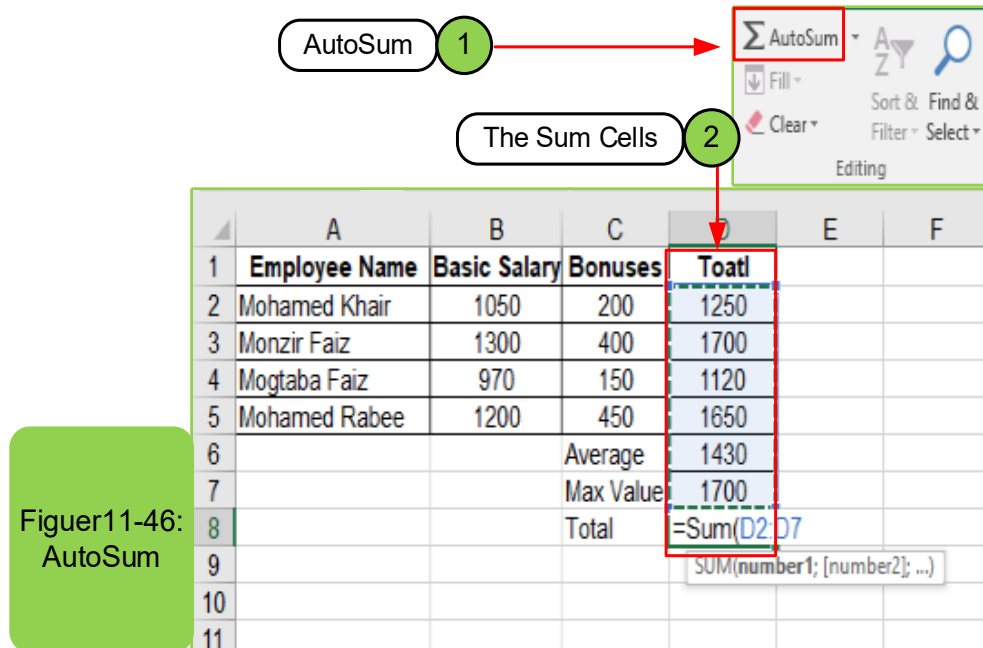
#### **Third: Calculation of the Sum Function:**

Sum function is used for the automatic addition operations.

The AutoSum button performs the addition function, and can be handled by following these steps:


- Click on the cell in which you want to show its result.
- Click the (AutoSum) button on the (Home) tab within the (Editing) group to automatically select the column or row.

- Drag directly with the mouse on the values involved in the addition process, and it appears as follows on the values box (D2: D7).
- Press the (Enter) key to display the value on the location chosen in step (1).



I am going to obtain the sum of the numbers in column B, select cell B8, go to the (Home) tab, then click on the (AutoSum) button. Or select the cell and press (ALT+ =).

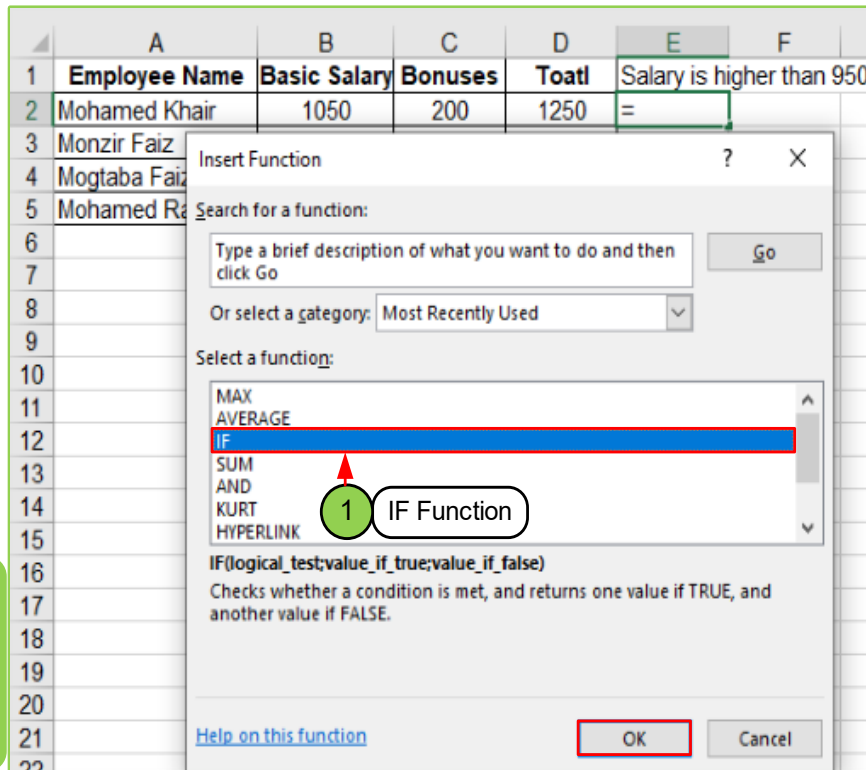
**Skill 11 - 21**  
Kowing the Calculation of Condition Function (IF)



***Forth: Calculation of the Condition Function (IF)***

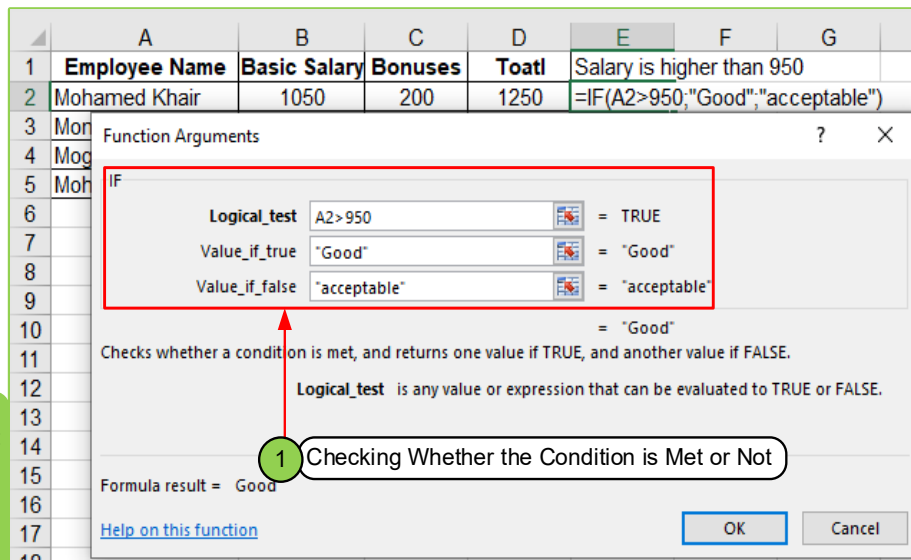
Condition Function (IF) is used to test the cells values so that it gives a certain value that confirms the condition, and it uses the comparison conditions (=, <, >, <>, ...). To deal with this function, follow these steps:

- Click on the cell in which you want to show its results.
- Click on the function button (FX) on the (formula)tab, and then the insert function dialog box appears directly.



Figuer11-47:  
The IF  
Function  
Calculation

- Click on “IF” then click “OK”, then a dialog box will appear to define the condition (logical test)
- Write the values resulting from the verification of the condition or not in the fields (Values if True), (Value if False), respectively. For example, if the salary is greater than 950, type “good” and if less than write “acceptable” as shown in the Figure11- 48.



Figuer11-48:  
The IF  
Function  
Calculation

- Click (OK) to see the results directly on the result cell.
- Perform the filling process as shown in Figure 11- 49.

Figure 11-49: The IF Function Calculation

	A	B	C	D	E	F
1	<b>Employee Name</b>	<b>Basic Salary</b>	<b>Bonuses</b>	<b>Toatl</b>	Salary is higher than 950	
2	Mohamed Khair	1050	200	1250	Good	
3	Monzir Faiz	1300	400	1700	Good	
4	Mogtaba Faiz	970	150	1120	Good	
5	Mohamed Rabee	1200	450	1650	Good	
6			Average	1430		
7			Max Value	1700		
8			Total			
9						

The Results

A Table shows the descriptions of functions according to their importance and the most used: whether:

Function	Description
SUM	This function adds all the numbers in a range of cells
IF	This function checks whether a condition is met, and returns one value if TRUE, and another if FALSE.
COUNTIF	This function is used to count the number of cells that confirm specific condition
ABS	This function is used to obtain the absolute value of the number
ACOS	This function returns the arccosine of a number
DGET	This function extracts from a database a single record that matches the conditions you specify
GETPIVOTDATA	This function extracts data stored in a PivotTable
CHAR	This function returns the character specified by the code number
ENCODEURL	This function returns a URL-encoded string
FILTERXML	This function returns specific data from XML content by using the specified XPath
DOLLAR	This function converts a number to text, using currency format \$ (Dollar)
BETADIST	This function returns the cumulative beta probability density function
ADDRESS	This function creates a cell reference as text in a single cell in the worksheet
AND	This function returns TRUE if all arguments are TRUE
CELL	This function returns information about the formatting, location, or contents of the first cell



Function	Description
BIN2DEC	This function converts a binary number to decimal
DATE	This function returns the number to specific date
MODE	This function returns the most frequently occurring or repetitive value in an array of data
RANK	This function returns the rank of a number in a list of numbers

**Common errors when using functions:**

Error	Error Description
#####	The inserted values in the cell are too long and can not be shown
!VALUE#	The typed formula contains error
!DIV/0#	Division by zero
?NAME#	Misspelling in the function or formula name
!REF#	Cell reference is incorrect

**Skill 11 - 22**  
Knowing How to Format Cells

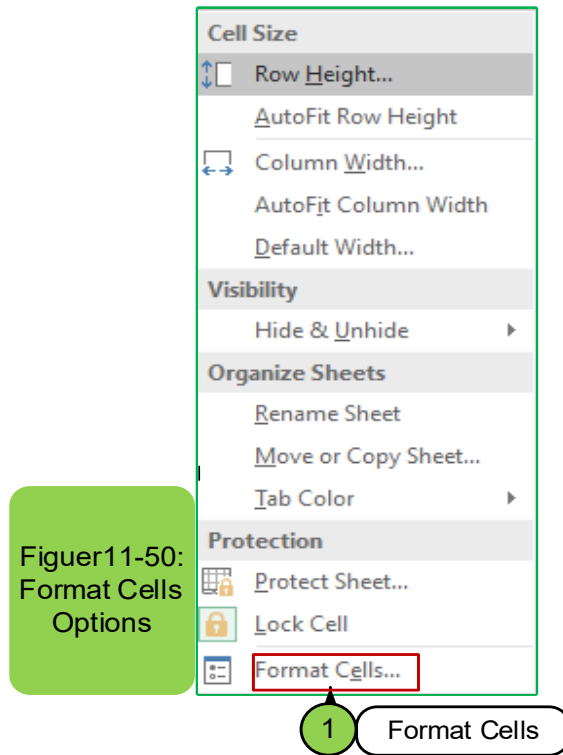


**11 -14 Format Cells:**

**11 -14 -1 Changing the Format (Features) of Specific Cell:**

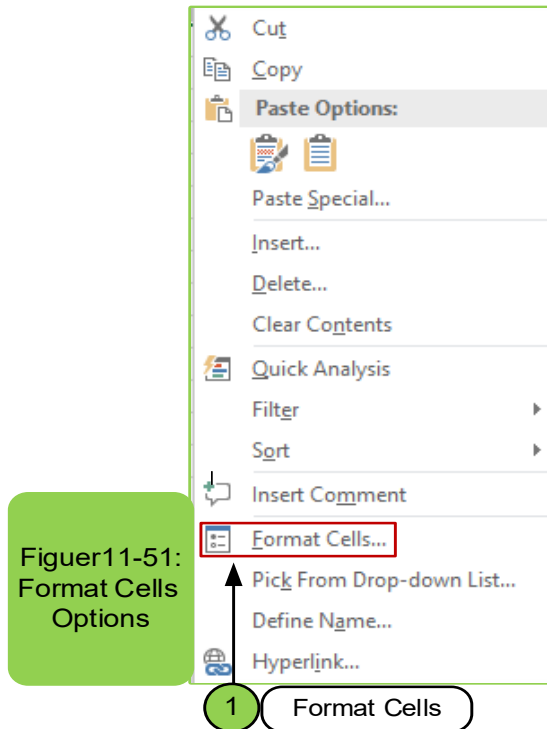
Sometimes the user of the Excel worksheet program needs to change the format (features) of a specific cell by the following:

- We click on the cell whose format we want to change.
- From the "Home" tab, we click on the "Format" option and then a menu appears to us, so we choose "Format Cells" as in Figure 11-150.

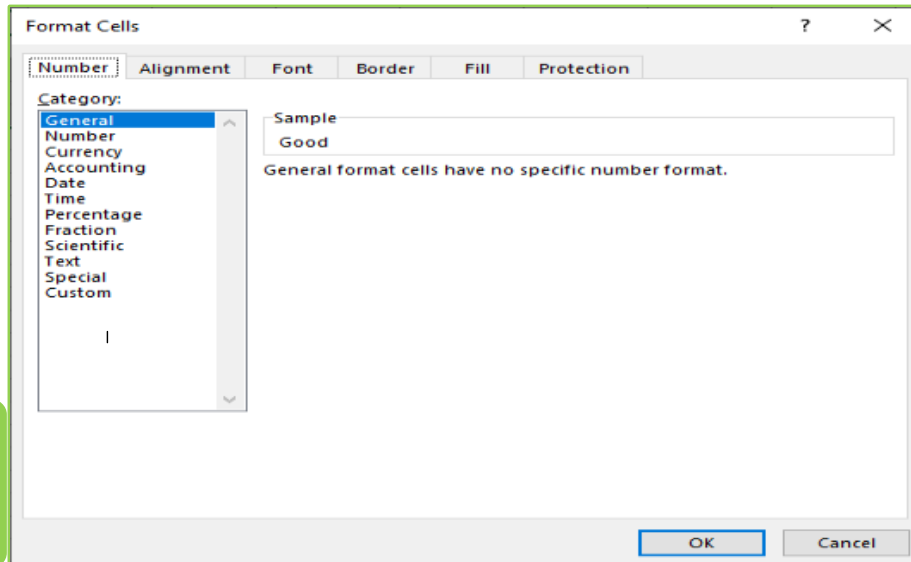


**Note:** There is another way to access the Format Cells option:

- We click the mouse button on the cell we want to change its format to select.
- Click on the right mouse button and then a menu appears and from which we choose the option “Format Cells” as in Figure11 -51.



- When you click on the "Format Cells" option as in the previous menu, a dialog box will appear with a number of options that can be applied to the cell as in Figure11 -52.



Figuer11-52:  
The Options  
within Format  
Cells

- We choose the feature we want to apply to the cell and then we press OK.

### Skill 11 - 23

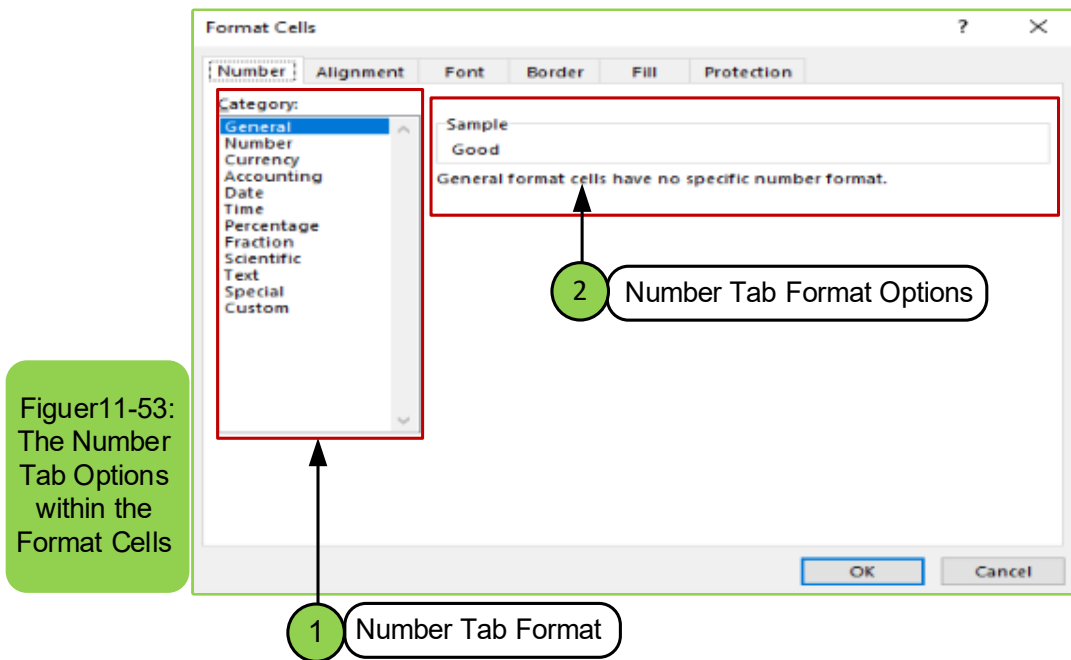
#### Knowing How to Work with the Format Cells Options

#### **11 -14- 2 Format Cells Options:**

We find in the (format cells) option, as in Figure (8- 21), six tabs namely, number - alignment - font - border - fill - protection and we will review a part of them:

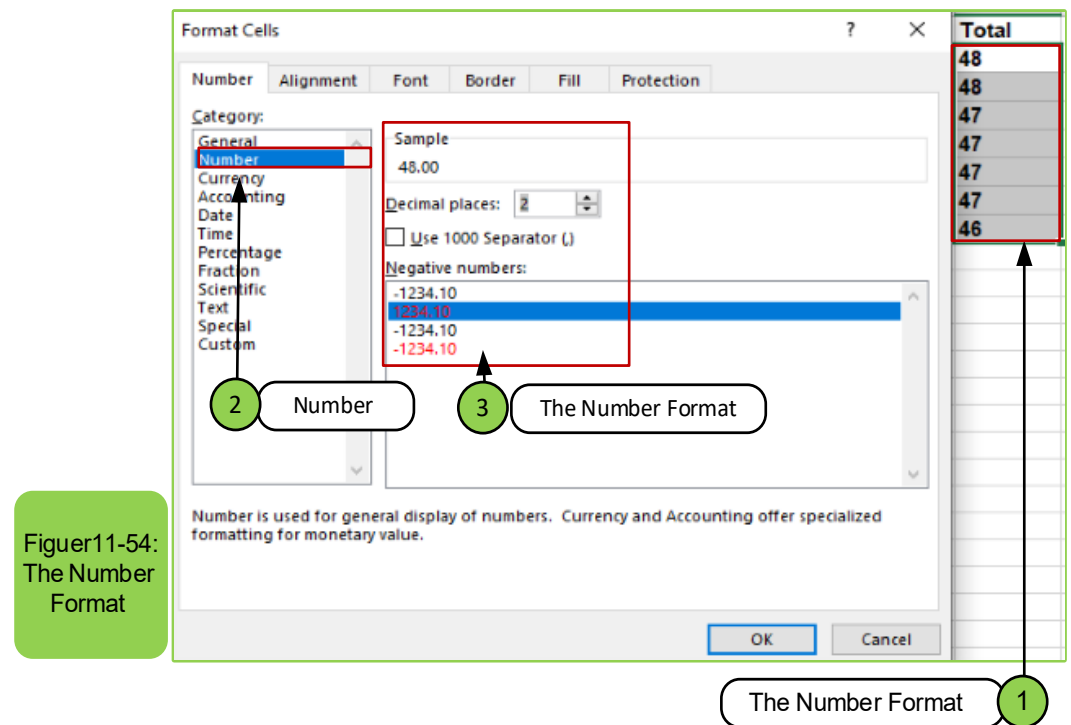
#### **First: Number Tab:**

This tab is used in the case of cells containing numbers and you want to change the way they are displayed and contains several options as in Figure 11- 53.



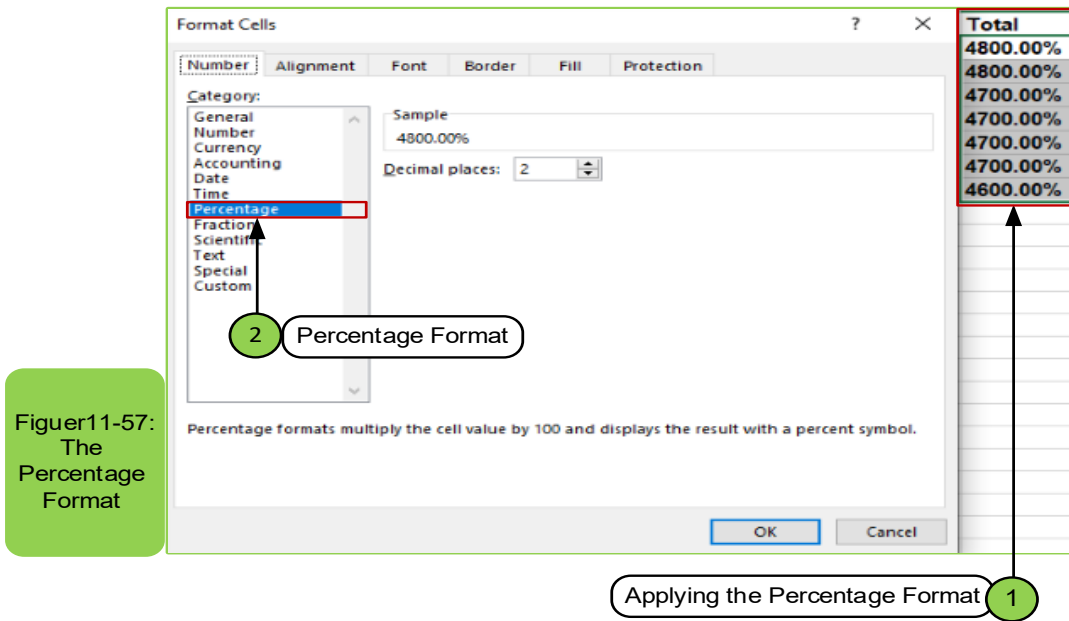
Figuer11-53:  
The Number  
Tab Options  
within the  
Format Cells

- **The Option “Number”:** This option is used in the case of the decimal point and determining the number of decimal places you want. For example, if you choose the (number) option and you selected the value 0 in the decimal, places. Then, this means choosing the correct number without a decimal point and in the case of choosing the value 1 this means the choice of one number after the decimal point and so on, and also through which you can select the form of a decimal point.



Figuer11-54:  
The Number  
Format



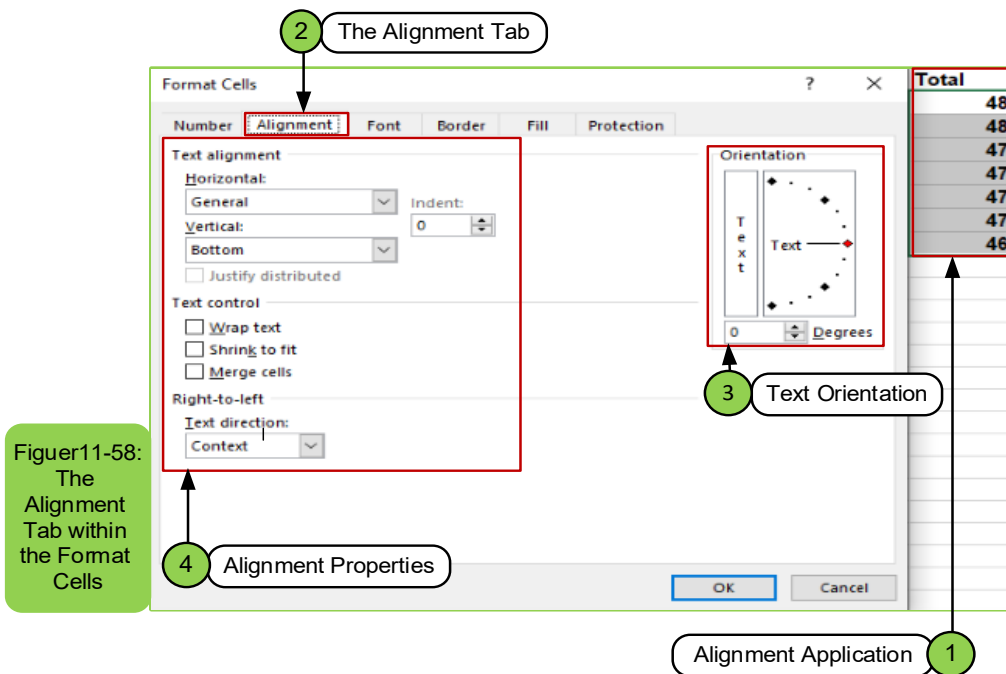


Figuer11-57:  
The  
Percentage  
Format

**Second: The Alignment tab:**

As we mentioned above, there are several tabs within the “Format Cells” option, and we have reviewed the number tab. Continuing, we will explain the alignment tab and its option through which you can change the direction of the text or make an alignment of the text as you like as in Figure1158-. The following steps explain how to apply it:

- Select the cell or cells you want to align.
- From the Format Cells dialog box, click the “Alignment” tab, as in Figure 11- 58, through which the options inside it can be applied.
- We click on the "OK" button to apply the action you took.

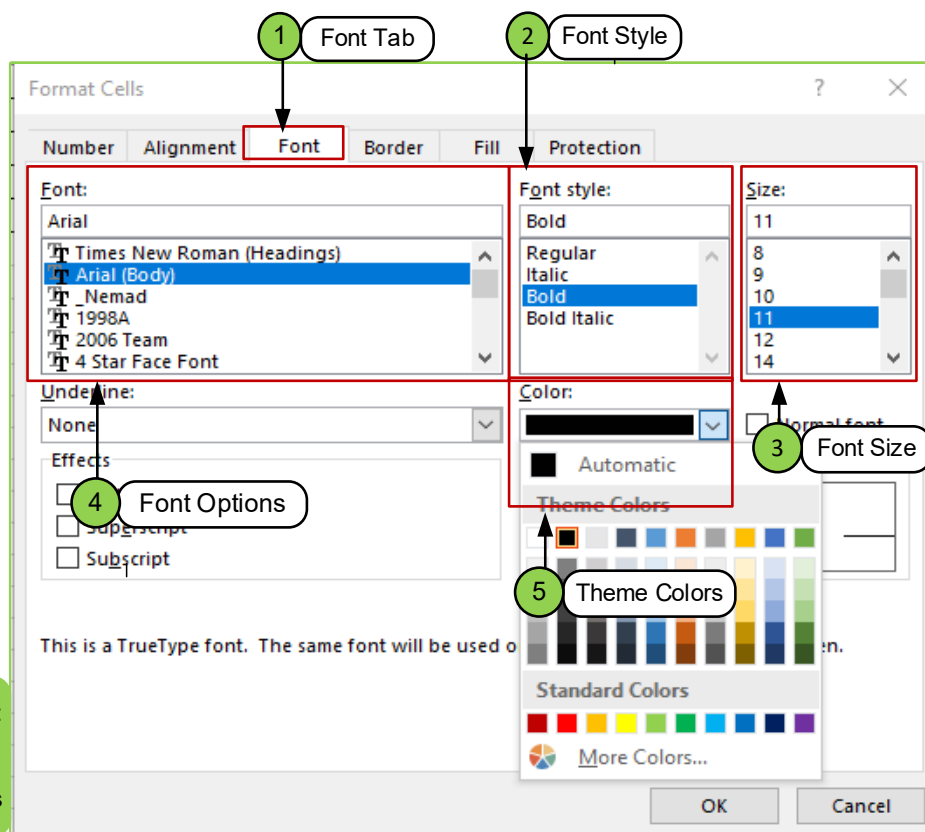


Figuer11-58:  
The  
Alignment  
Tab within  
the Format  
Cells

**Third: Font Tab:**

As we mentioned above, there are several tabs within the “Format Cells” option. We will explain the Font tab and its option, which is used to change the font of the text and the size of the text. We can also change colors and insert effect for them inside the cell or cells as in Figure1159-. To apply them, follow the following steps:

- Select the cell or cells for which you want to change the font style or colors.
- From the Format Cells dialog box, click the "Font" tab, as in Figure (11- 59), through which the font, font style, size and color can be changed and adding some effects to it.
- We click on the "OK" button to apply the action you took.



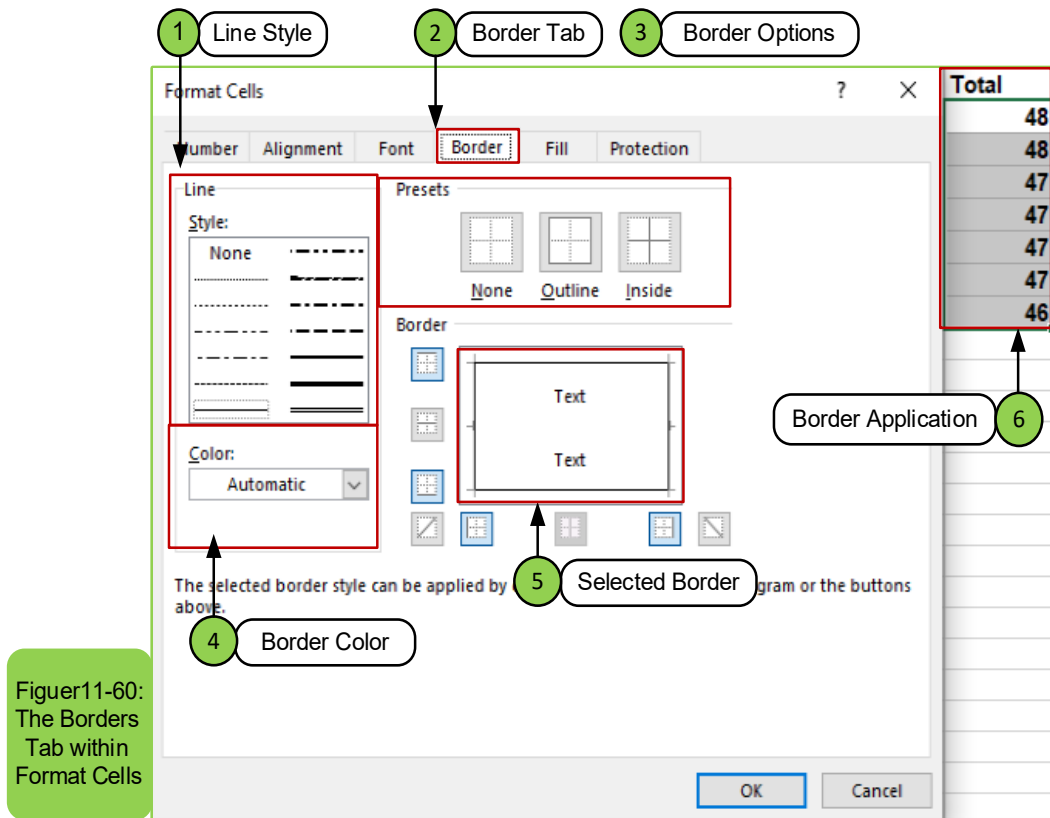
Figuer11-59:  
The Font  
Tab in the  
Format Cells

**Fourth: Border Tab:**

As we mentioned above, there are several tabs within the “Format Cells” option. We will explain the “Border” tab and its option, which is used to change the borders and color of a cell or cells. It can also be canceled and deleted as in Figure (11 -60), and to apply the borders to the cell, we follow the following steps:

- Select the cell or cells you want to add borders to or color.

- From the Format Cells dialog box, go to the "Border" tab as in Figure11 -60 and through it we can determine the border styles and the color of the border, whether they are borders inside or outside the cell.
- Click "OK" to apply the feature.



Figuer11-60:  
The Borders  
Tab within  
Format Cells

**Fifth: Fill Tab:**

As we mentioned above, there are several tabs within the "Format Cells" option. We will explain the "Fill" tab and its option, which is used to change the color of a cell or cells. It can also be canceled and deleted as in Figure (1161-). To apply the fill color to the cell, we follow the following steps:

- Select the cell or cells to be filled with a color.
- From the Format Cells dialog box, go to the "Fill" tab as in Figure1161-, and through it we can select the color that we want to add.
- Click "OK" to apply the feature.



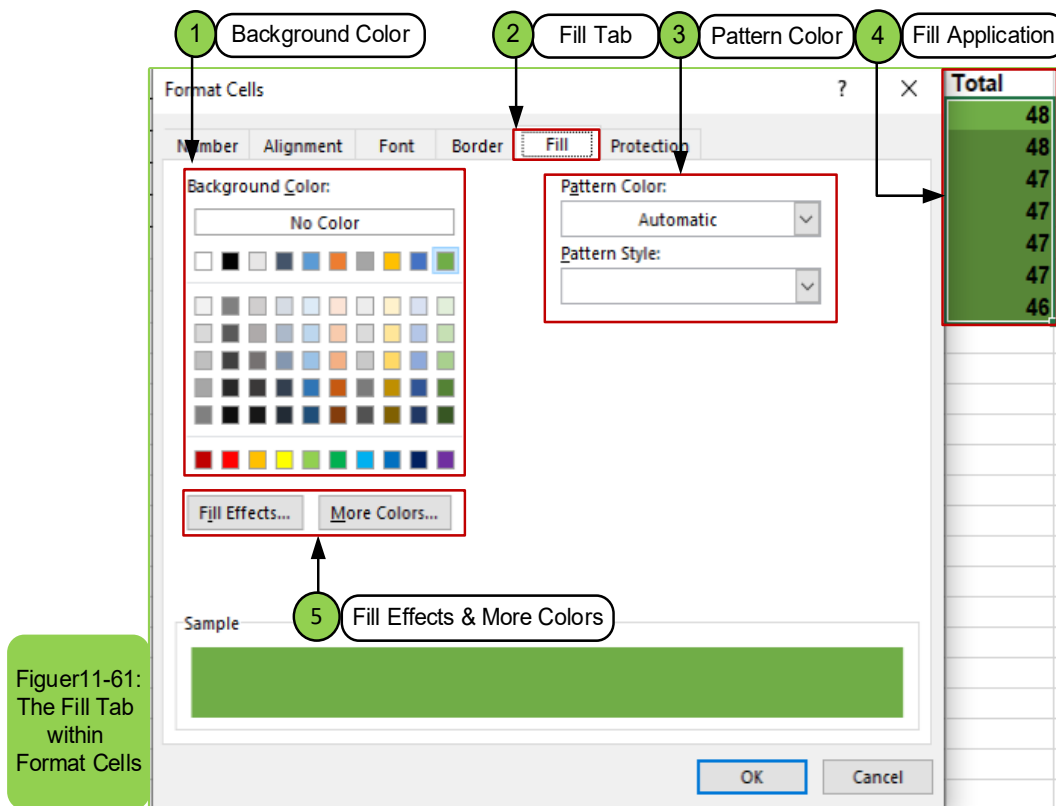



Figure 11-61:  
The Fill Tab  
within  
Format Cells

### Skill 11 - 24

#### Knowing How to Work with the Objects



#### 11 -15 Insert Objects:

Sometimes the user of excel worksheet program need to insert an object, insert illustrations, or import an object such as a picture, clip art, or AutoShape.

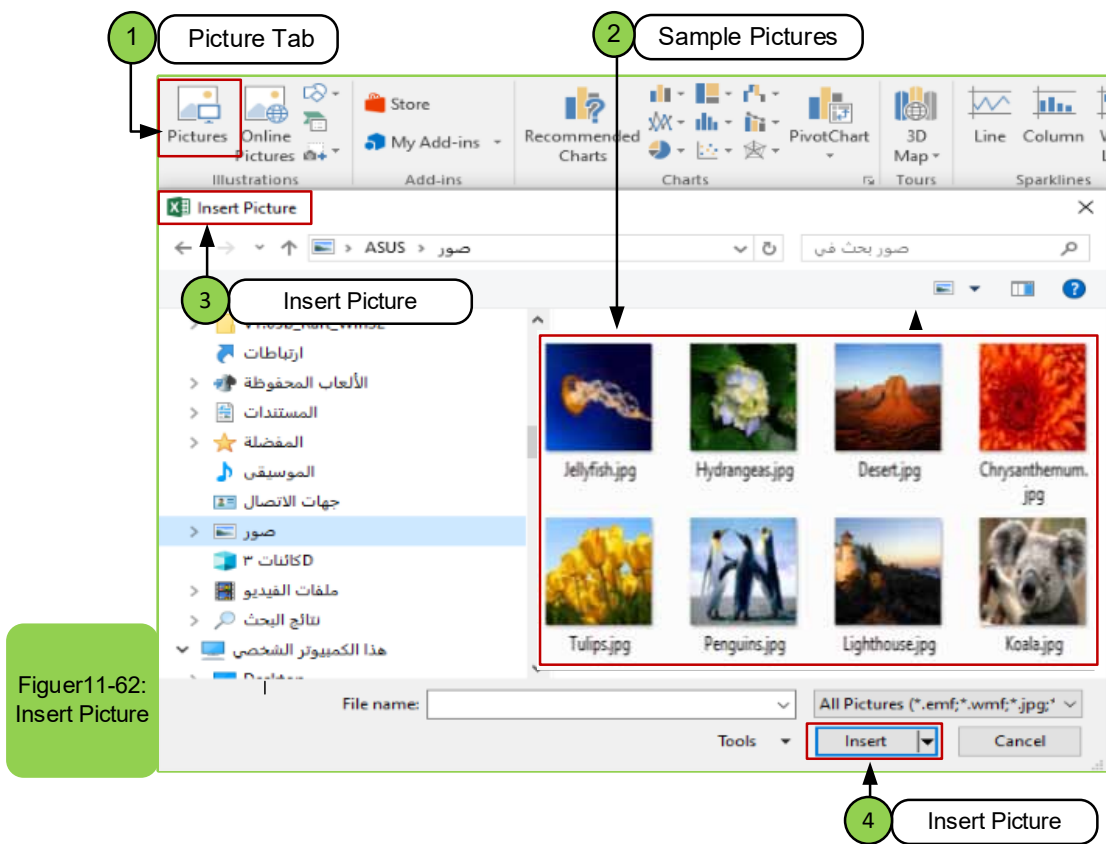
### Skill 11 - 25

#### Insert Pictures



#### 11- 15 -1 Insert Picture:

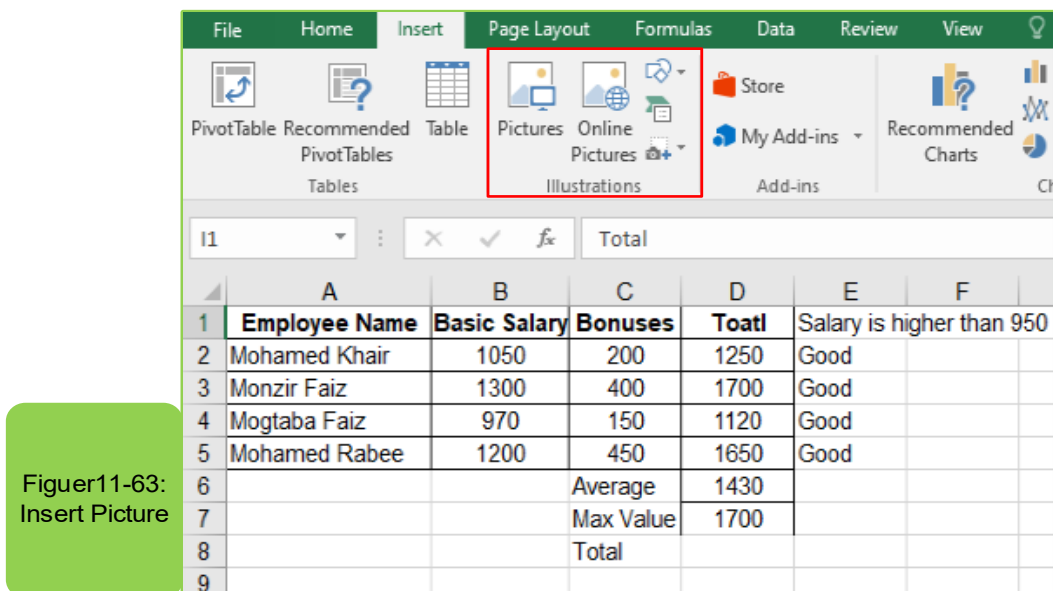
- Select the cell or cells you want to insert the picture near by clicking the left mouse button.
- From the “Insert” tab, we select “Pictures” which is located within the “illustrations” group as in Figure (1162-).
- The Insert Picture window appears for us and we select the picture we want to insert and click on it with the left mouse button, as in Figure 1162-.
- Click on the “Insert” option to apply the action.



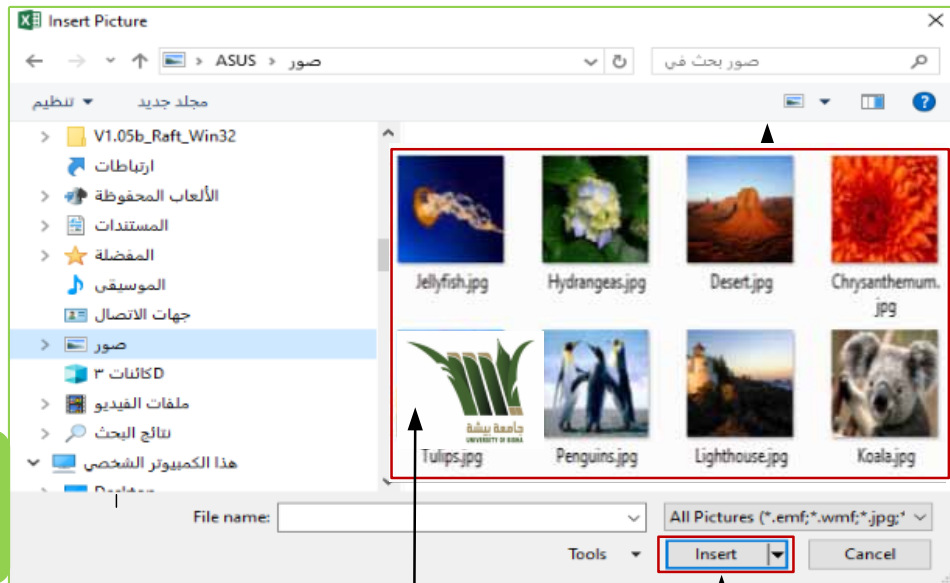
### Another Way to Insert Pictures

To insert a picture, follow these steps:

- From the Insert tab and from illustrations group, click pictures as shown in Figure 11-63.



- The insert picture window will appear as shown in Figure 11-64.
- Select the picture location on the computer



Figuer11-64:  
Insert Picture

- 1 Select Picture
- 2 Insert Picture

- Choose the picture you want to insert by clicking on it with the left mouse button once and then clicking Insert or by pressing the left mouse button twice.
- The picture will be inserted in the document as shown in Figure 1165- Logo picture.

	A	B	C	D	E	F	G	H	I
1	<b>Employee Name</b>	<b>Basic Salary</b>	<b>Bonuses</b>	<b>Toatl</b>	Salary is higher than 950				
2	Mohamed Khair	1050	200	1250	Good				
3	Monzir Faiz	1300	400	1700	Good				
4	Mogtaba Faiz	970	150	1120	Good				
5	Mohamed Rabee	1200	450	1650	Good				
6			Average						
7			Max Value						
8			Total						
9									
10									

Figuer11-65:  
Insert Picture

### Resize the Picture:

You can change the size of the pictures till they are compatible with the desired size of the worksheet by selecting the picture by clicking on it with the mouse button till the eight selection circles appear as in the Figure 1166-.

Figuer11-66:  
Image Resizing

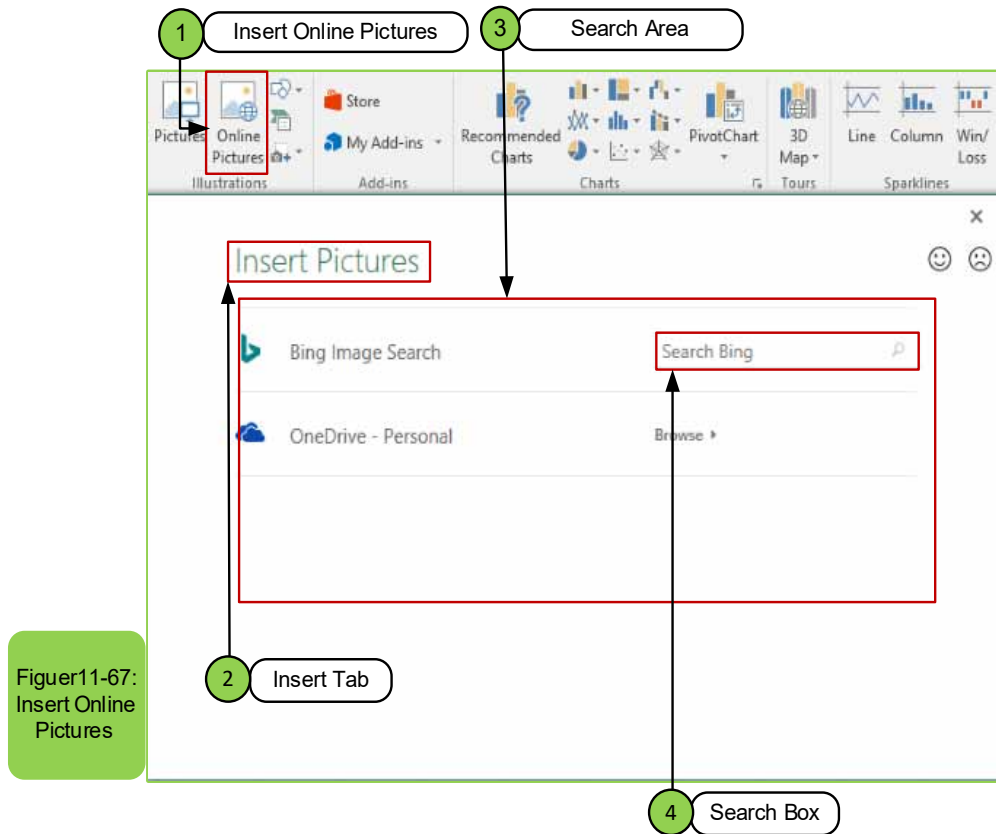


- If the mouse pointer reaches one of the eight circles, its shape will turn into two crossed arrows.
- If you want to enlarge the picture so that you maintain the ratio between height and width, place the mouse pointer at one of the four circles located at the corners, then the pointer will turn into two opposite inclined arrows at an angle of 45 degrees.
- Click the left mouse button and then the pointer becomes crossed arrows and drag.
- Leave the mouse button when you reach the desired size.

### Insert Pictures via the Internet:

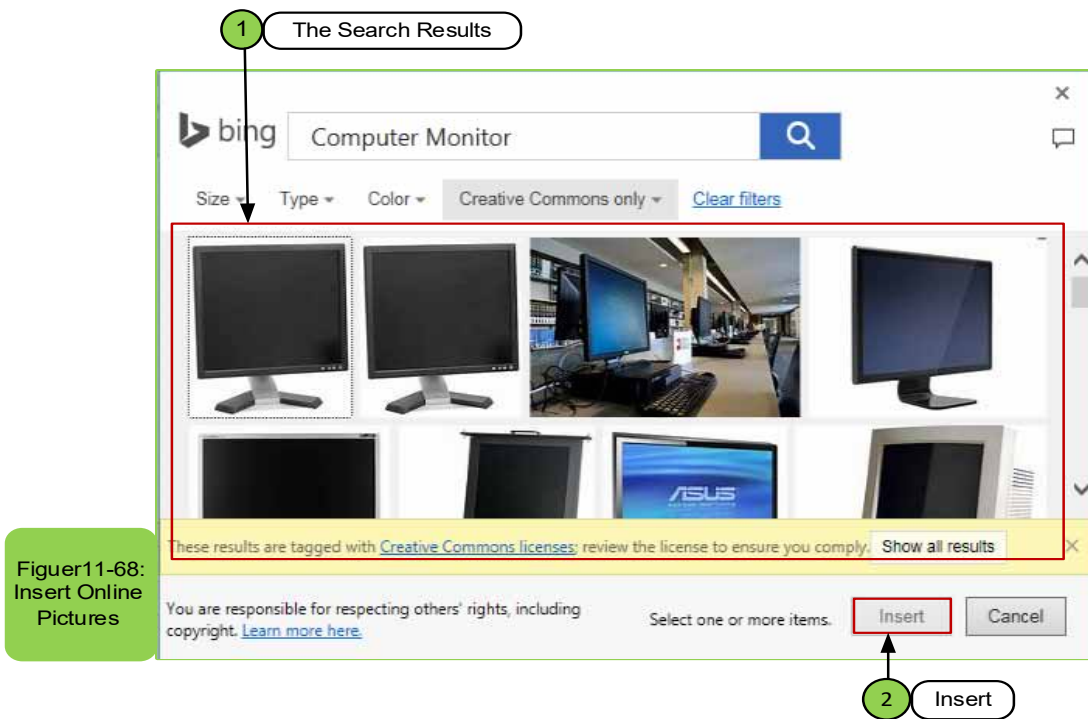
Through the excel worksheet program, we can search for pictures from various sources and insert them via the Internet, through the following steps:

- Select the place or cell you want to insert the picture near.
- From the “Insert” tab we choose “Online Pictures” that falls within the illustrations group as shown in Figure 11 -67.
- The Insert picture window appears for us and we write the type of picture that we want to insert in the search box and then click Enter as in Figure11 -67.



Figuer11-67:  
Insert Online  
Pictures

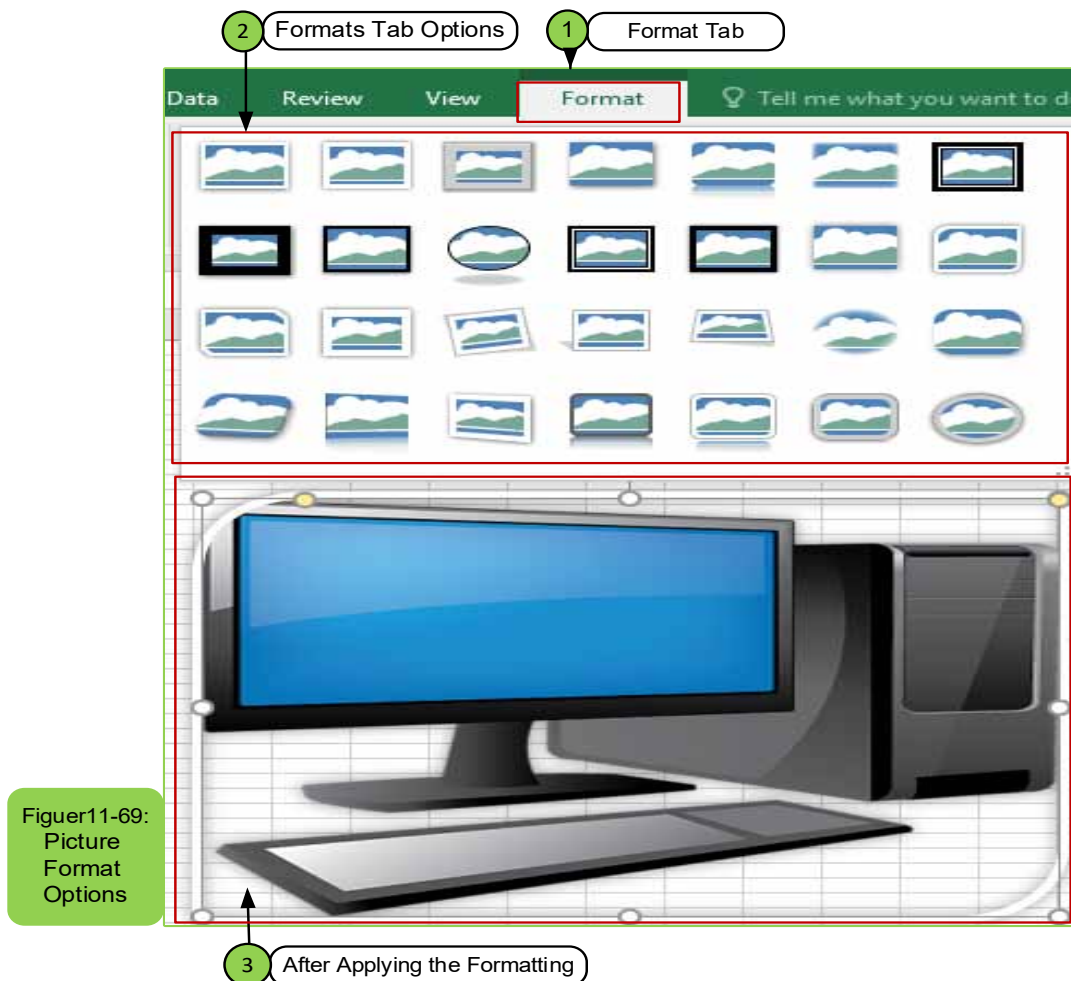
For example, to search for a picture of the computer monitor, we write in the search box as in option (4) the computer monitor and press Enter. Then we wait for the search results to appear and choose the desired picture by clicking on it with the left mouse button and then clicking on the button “insert” as in the figure 11 -68.



Figuer11-68:  
Insert Online  
Pictures

**Note:** We can also change the size of the picture that was inserted into the workbook by:

- Selecting the picture you want to resize by clicking on it with the left mouse button. Small circles will appear on the edges of the picture.
- Placing the pointer on the circle in the direction you want to change the size and then drag till we get the desired size.
- We can also change the format of the picture inserted into the workbook by:
- Selecting the picture, you want to change its format by clicking on it with the left mouse button. The "Picture Format" tab will appear.
- Many formatting options will appear in the "Picture Format" tab. Choose the appropriate format that you want to apply, as shown in Figure 11 -69.



Skill 11 - 26

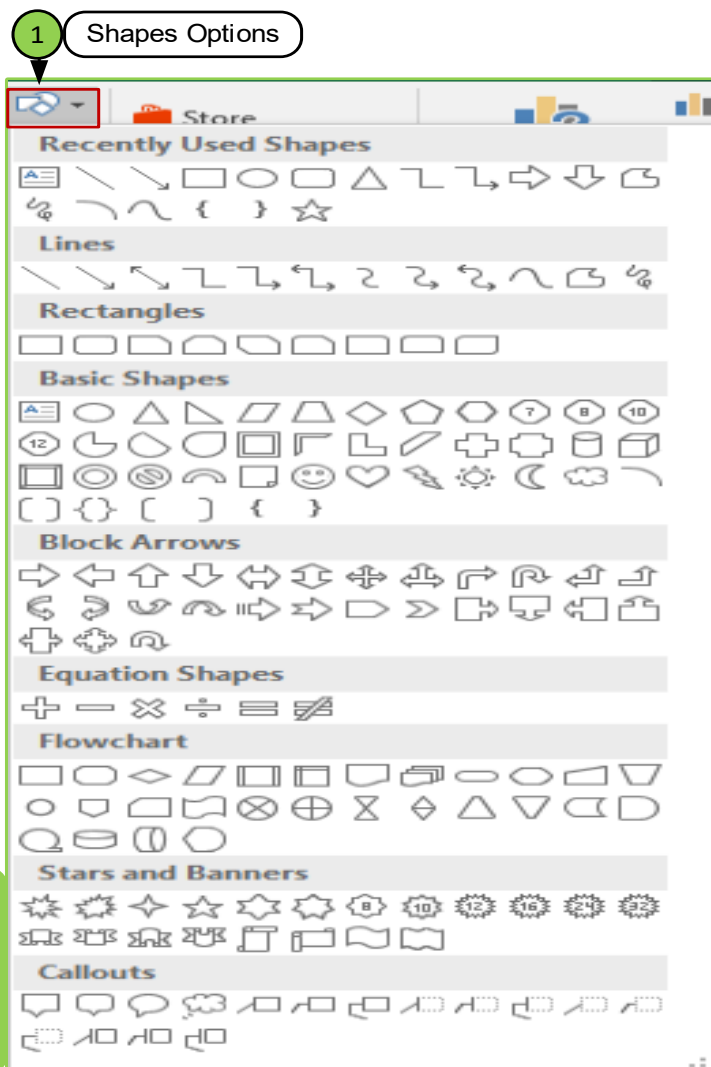
Recognizing/Knowing How to Insert Shaps



**11 -15 -2 Insert Shapes:**

Sometimes the user of excel worksheet program may need to insert shapes such as circles, squares and names, or automatic graphics (SmartArt). To perform one of the two cases, we follow the following steps:

- From the “Insert” tab then “Shapes” that falls within the illustrations group, a list will appear to us as in Figure1170-.
- We choose the shape that we want to insert by clicking on it with the left mouse button.
- We go to the place we want to place the shape and press the left mouse button to apply.



Figuer11-70:  
Adding a  
Shape from  
the Shapes  
Option

**If you need to add (SmartArt), we follow these steps:**

- From the "Insert" tab then "SmartArt" which is located within the illustrations group, we click on it with the left mouse button, and then a menu appears as in Figure1171-
- We go to SmartArt graphic options to choose the desired SmartArt shape
- Then we click on the desired SmartArt with the mouse
- We click on the "OK" button to apply the required SmartArt.

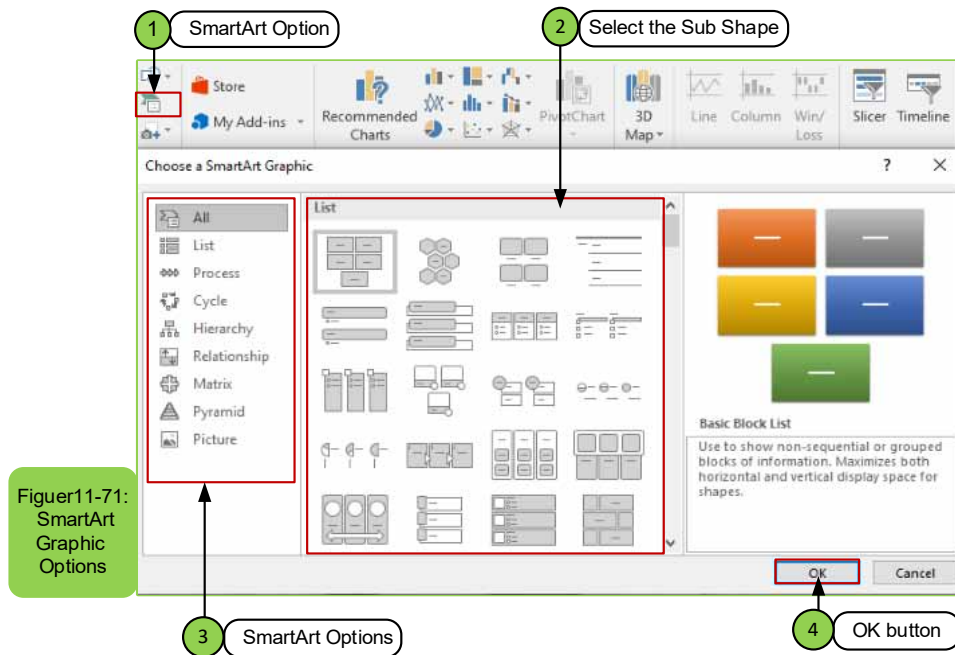



Figure11-71:  
SmartArt  
Graphic  
Options

## Skill 11 - 27

### Knowing How to Work with Charts



#### **11 -15- 3 Charts:**

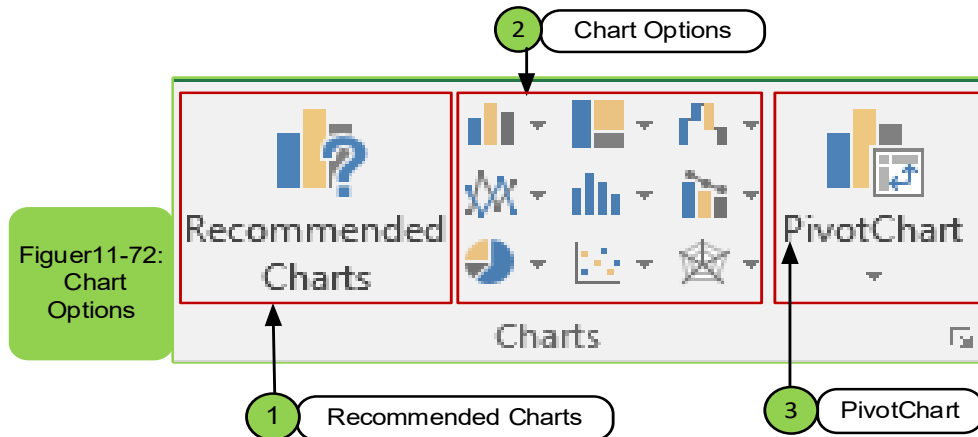
One of the most important features of the excel worksheet program is that we can represent data and display it in the form of charts or graphs, through which it can help in understanding the results more quickly, so we find that there are several types of charts such as:

- Pivot Chart
- Column or Bar Chart
- Hierarchy Chart
- Line or Area Chart
- Waterfall, Funnel, Stock, Surface, or Radar Chart
- Scatter or Bubble Chart
- Pie or Doughnut Chart

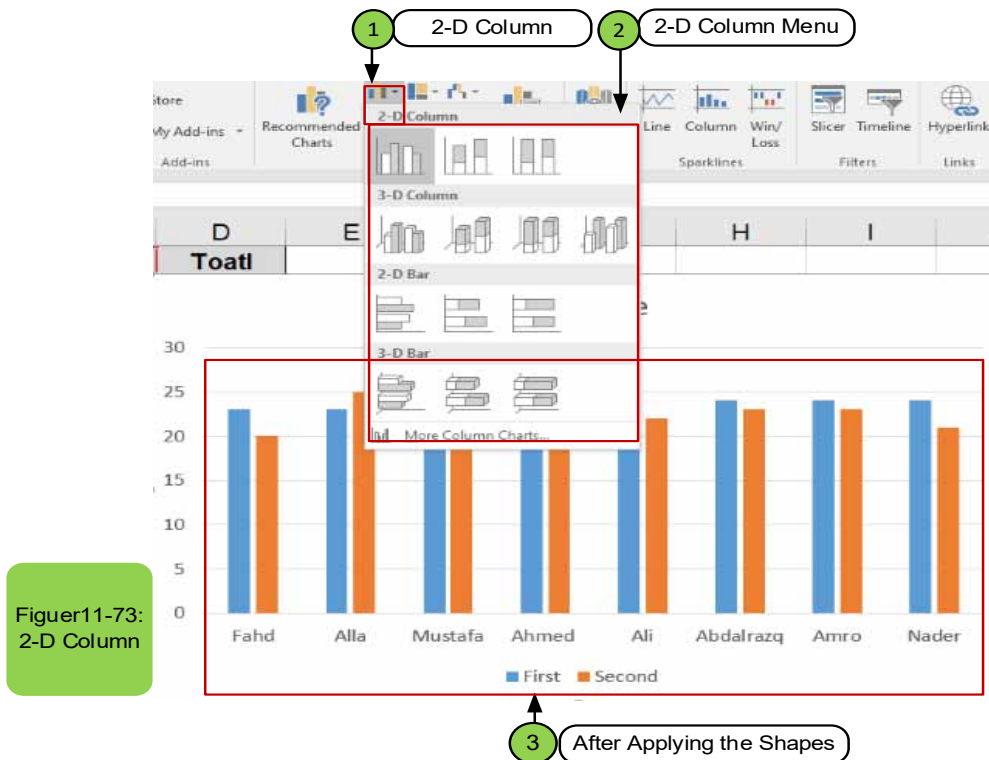


To apply the chart, the following steps should be followed:

- You must specify the data (by selecting columns) from the open workbook that you want to represent in the form of charts or graphs.
- From the “Insert” tab, we go to the “Charts” group menu, as shown in Figure 11- 72.

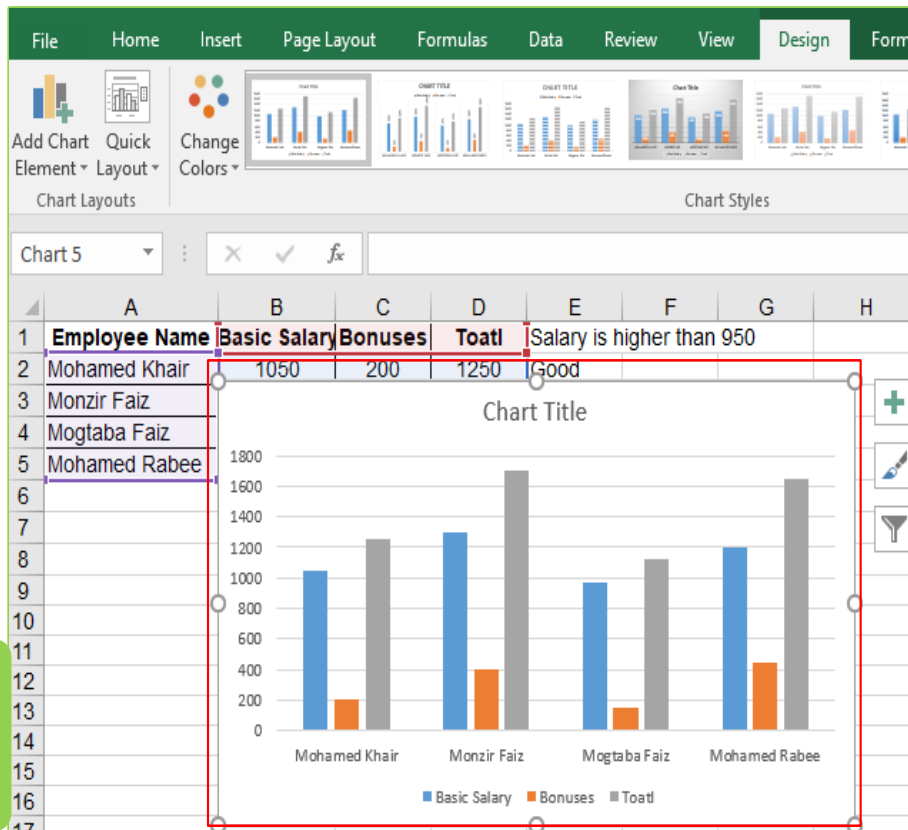


- There are several types of charts with which data can be represented, such as insert column or bar chart or insert hierarchy chart, insert waterfall or stock chart, insert surface chart, insert scatter chart, or insert pie chart.
- In case of the chosen the bar chart as in Figure11 -73, then we click on the chosen chart with the left mouse button.



**To Edit the Chart:**

- Click on the chart, then click on the (Chart Design) tab to enable you to format the layout of the chart:
- By choosing one of the options in the (chart layouts) group that allow adding axis title, chart title, showing chart data (by clicking on the axis label), you will be able to edit by clicking directly on the chart title or the axis title and edit directly as in Figure 11- 74.



Figer11-74:  
Insert Chart

**Skill 11 - 28**  
Knowing How to Change the Type and Size of Chart



**To control the size of the chart:**

- Click on the chart, so that the movement points appear on the four corners of the chart and in the middle of each line of the chart area as shown in the figure 11 -75.
- Click and hold on any of the movement points and drag in the desired direction, so that the size of the chart directly increased or reduced.

Figuer11-75:  
Controlling a  
Chart

