



Computer science



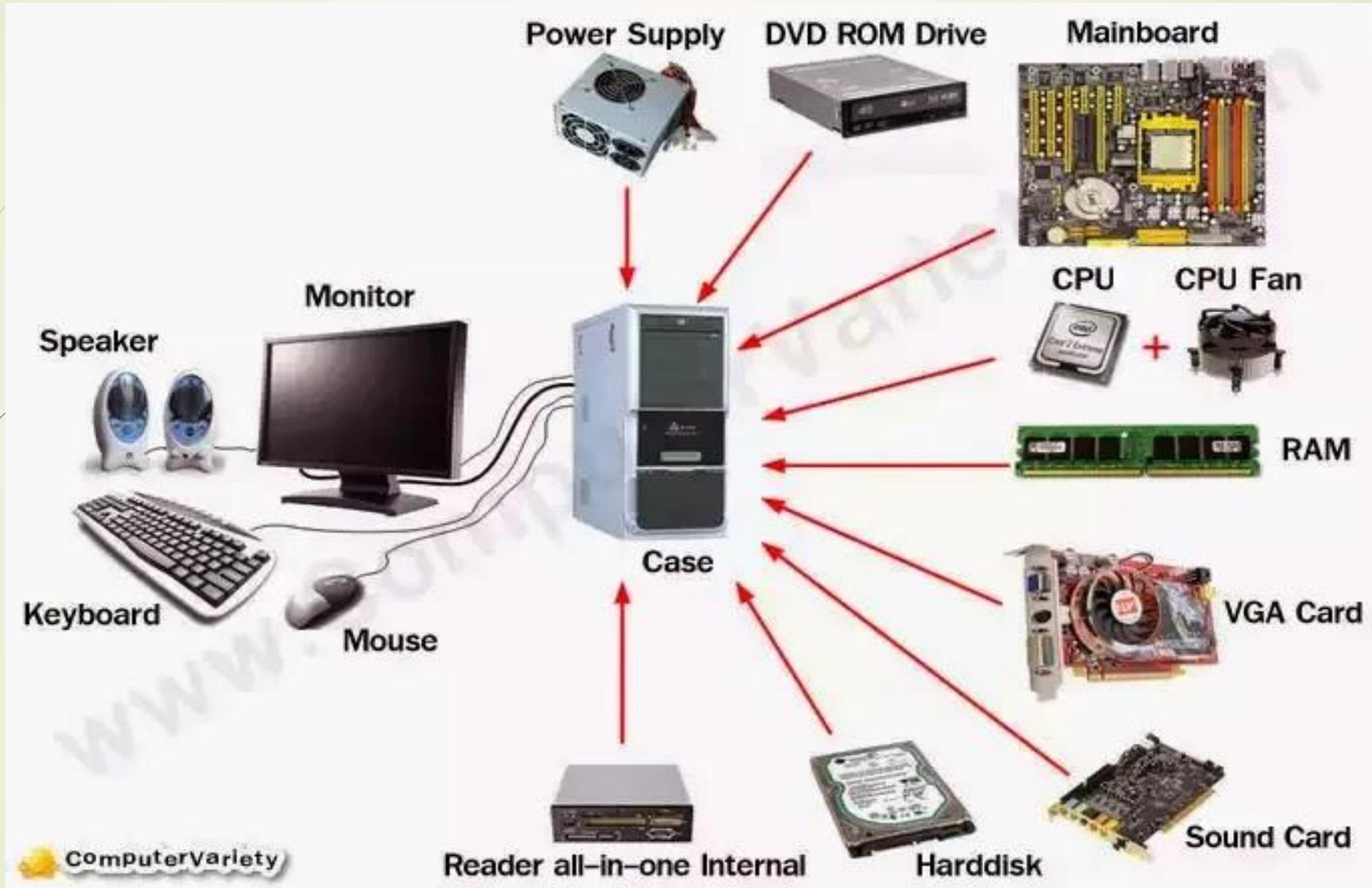
Computer Hardware

It is any physical device used in or with your machine. It is divided into three parts:

1- Input unit

2- Output unit

3- CPU (central processing unit)





Input unit

It is the piece of hardware used by a human to communicate with a computer.

For instance, a keyboard , Mouse , Scanner , Microphone , Digital camera and Disk drives.

Output unit

Is the piece of hardware used by a human (or other system) to communicate with a computer. For instance, a monitors ,printers ,Speakers ,Headphone .

* There are some devices work as input and output at the same time such as: Touch screen , CD/DVD , USB and Fax

CPU (Central processing unit)

It is the computer component that's responsible for interpreting and executing most of the commands from the computer's other hardware and software.

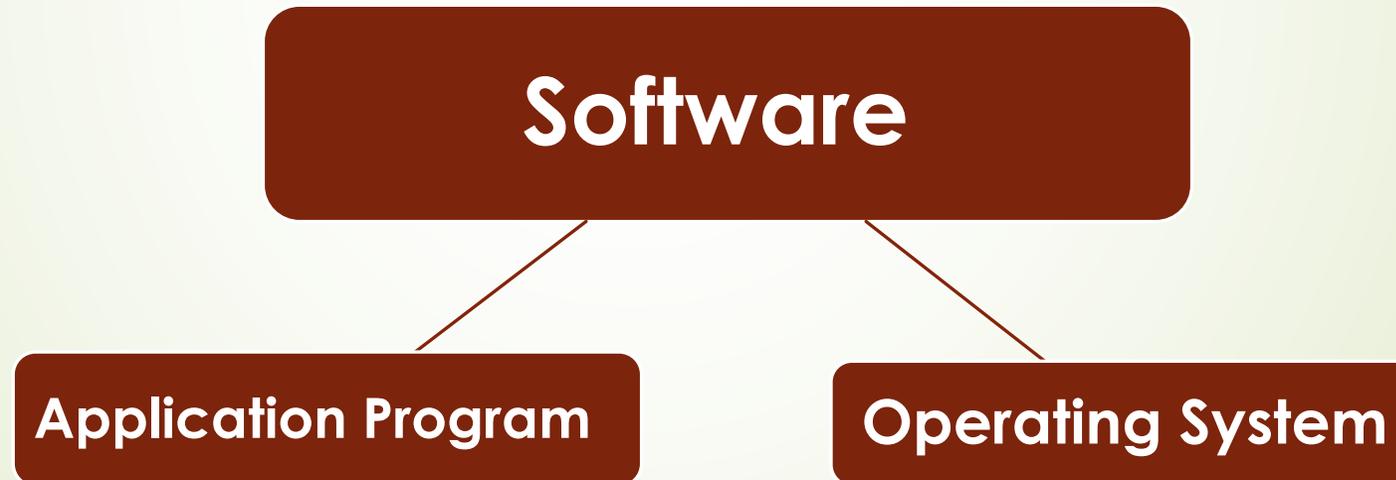
It is divided into three parts:

- 1- Arithmetic logic Unit (ALU).
- 2- Control Unit (CU).
- 3- main memory (divided into two main parts):
 - 3.1 RAM
 - 3.2 ROM

Computer Software

It is all information processed by computer systems, programs and data. Computer software includes computer programs, libraries .

* Computer hardware and software require each other.





Windows 10 operating system (OS)

Windows 10 – Installation

- There are two approaches you can take for installing Windows 10 in your computer: Upgrade or a Clean Install.
- Typically, when you upgrade your operating system, all your documents and applications remain unchanged, whereas with a clean install you would be starting again from scratch. But one important thing to verify first is if your computer has the necessary hardware to support Windows 10

System Requirements

- Although most computers nowadays probably have the necessary requirements for Windows 10. It will certainly be useful to know them in case you want to upgrade from an older system.
- The main requirements are:

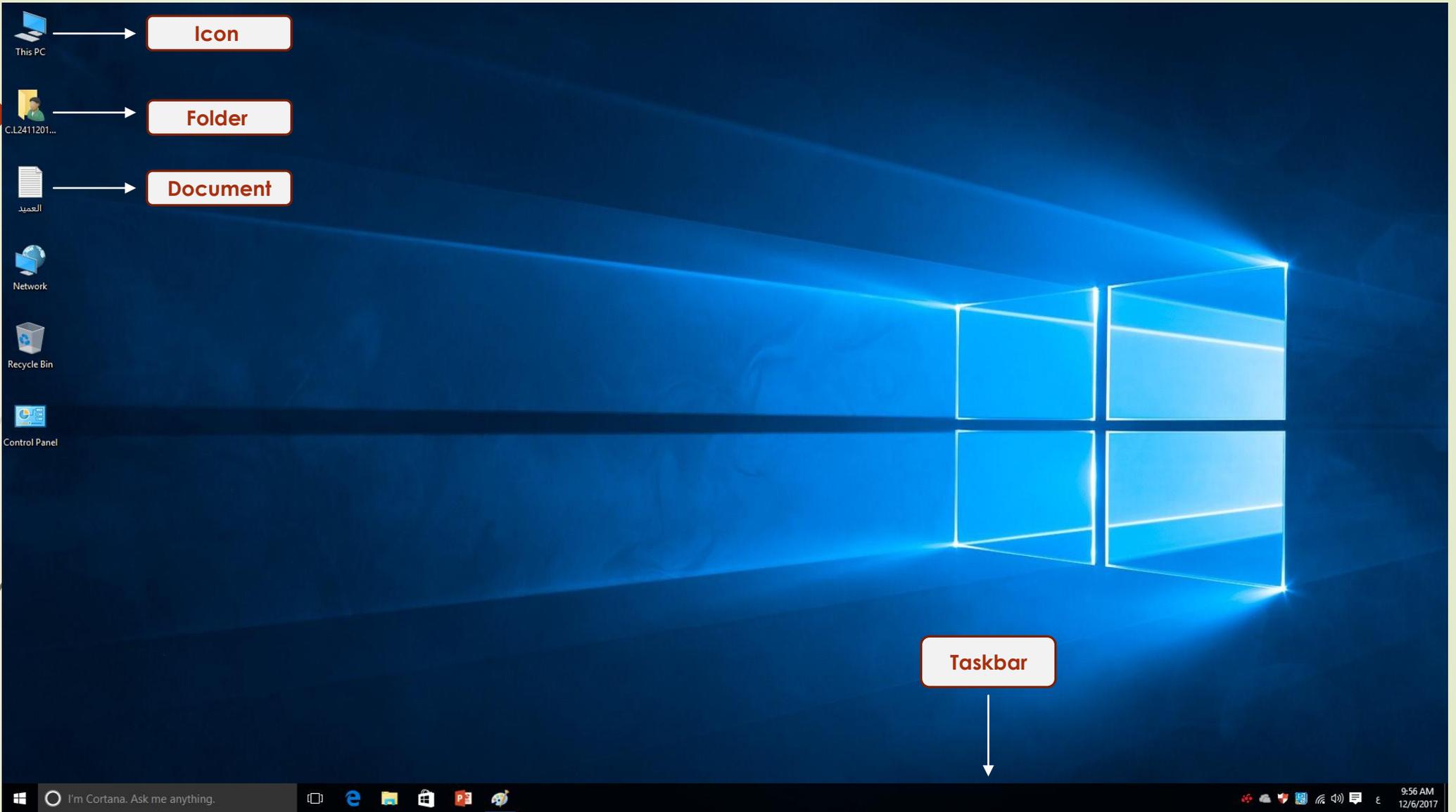
System Requirements

- A processor (CPU) with a clock rate of at least 1GHz.
- At least 1 to 2GB of memory (RAM), but Microsoft recommends 4GB.
- At least 16GB space in your hard disk.



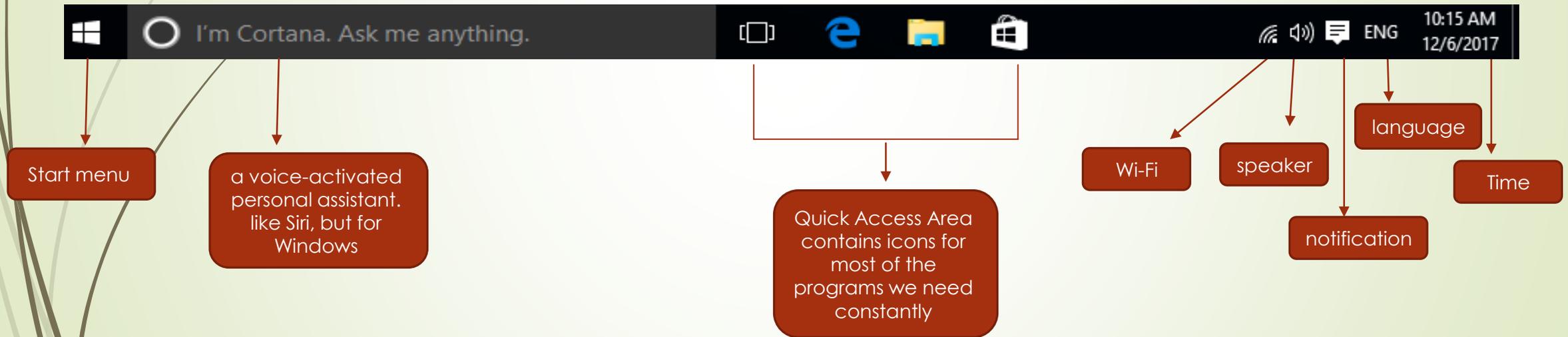
System Requirements

- One important thing to note is that the installation process itself will verify your computer hardware and let you know if it qualifies for a Windows 10 upgrade or not. If not, then you will need to upgrade your hardware



Taskbar

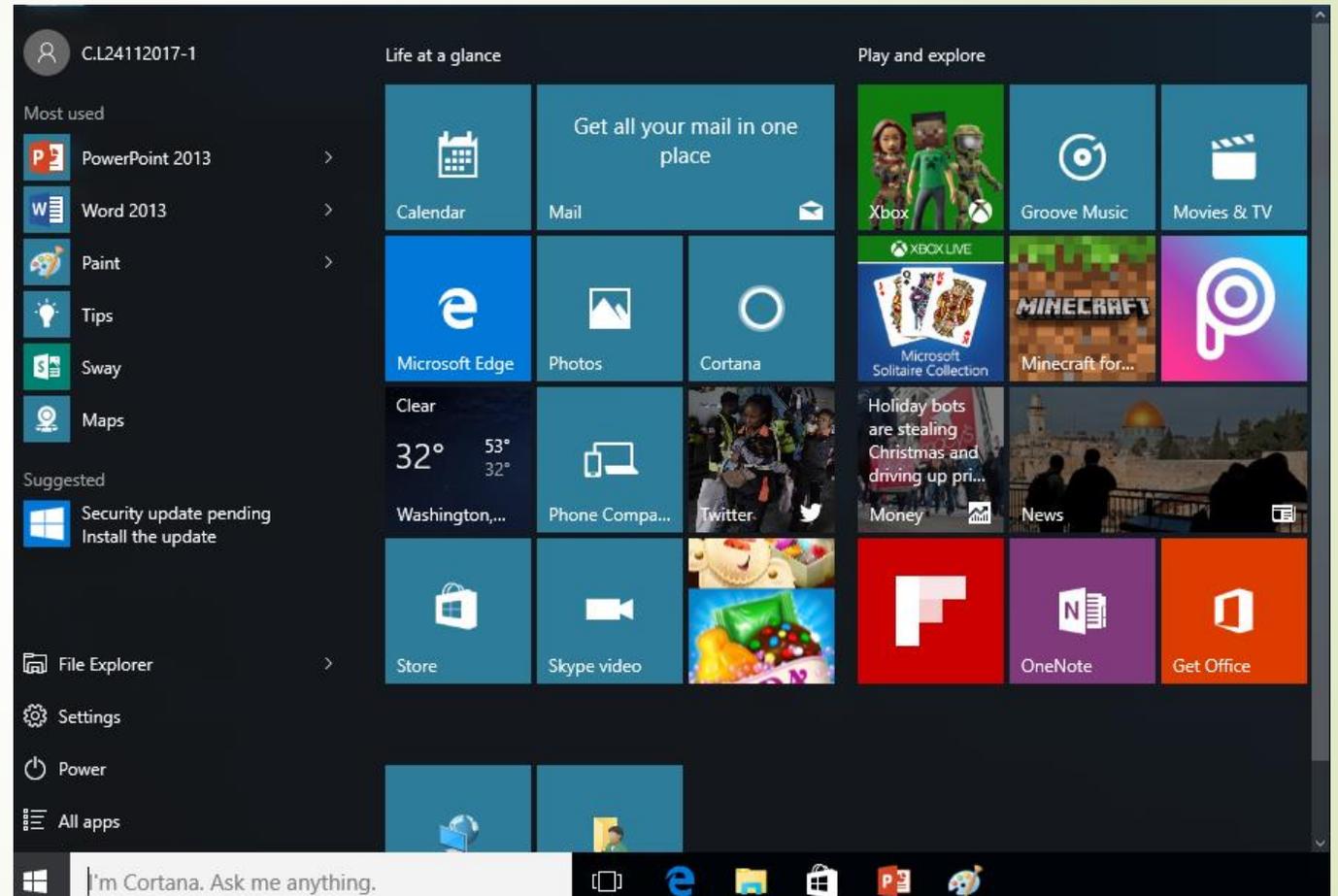
A taskbar is an element of a graphical user interface which has various purposes. It typically shows which programs are currently running.



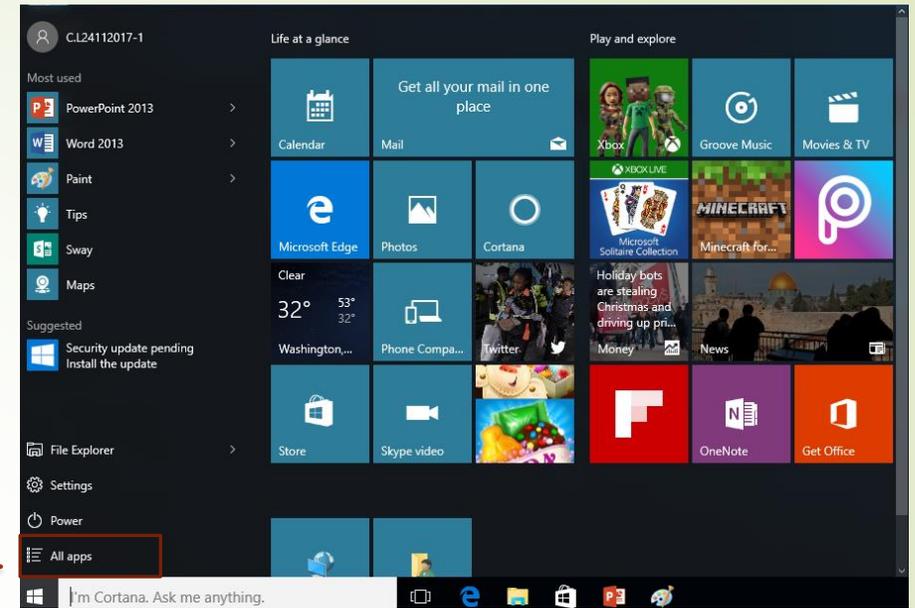
Start menu

search box

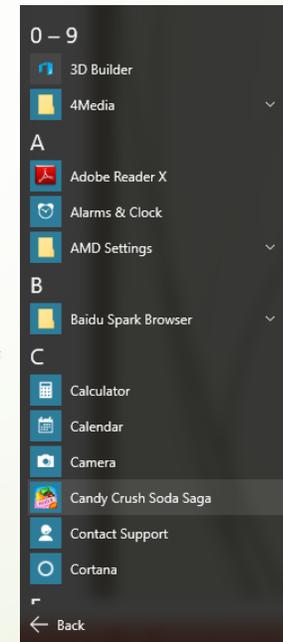
to search about
any thing inside
the computer or
from the internet
It's same of Siri in
iPhone but its for
windows.



Once you click on
All apps option from
(start menu)
The following menu
will appear



It contains all computer's applications

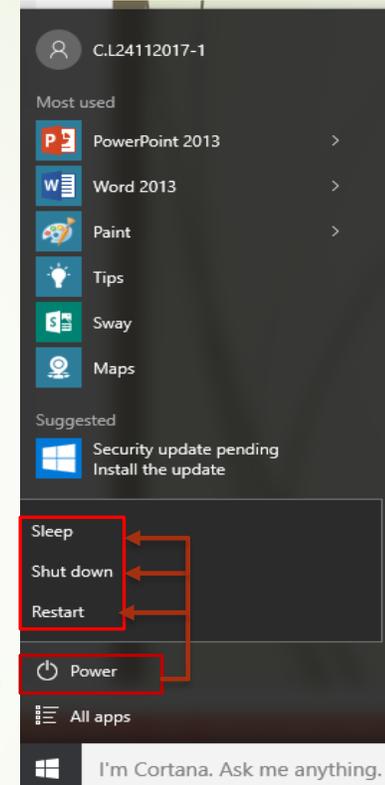


**power button contains
three options:**

Shut down: turn off the
computer.

Sleep: Turn off the
computer temporarily.

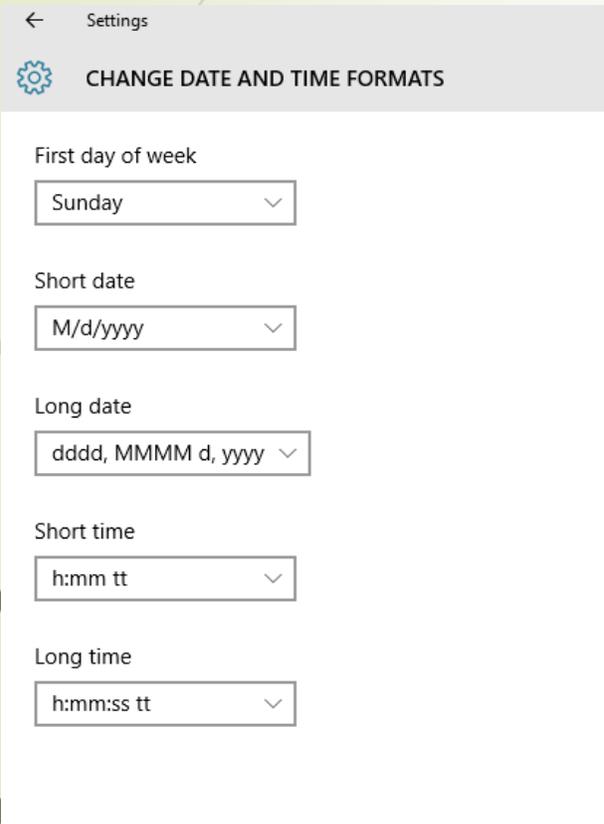
Restart: to re-run the
computer.



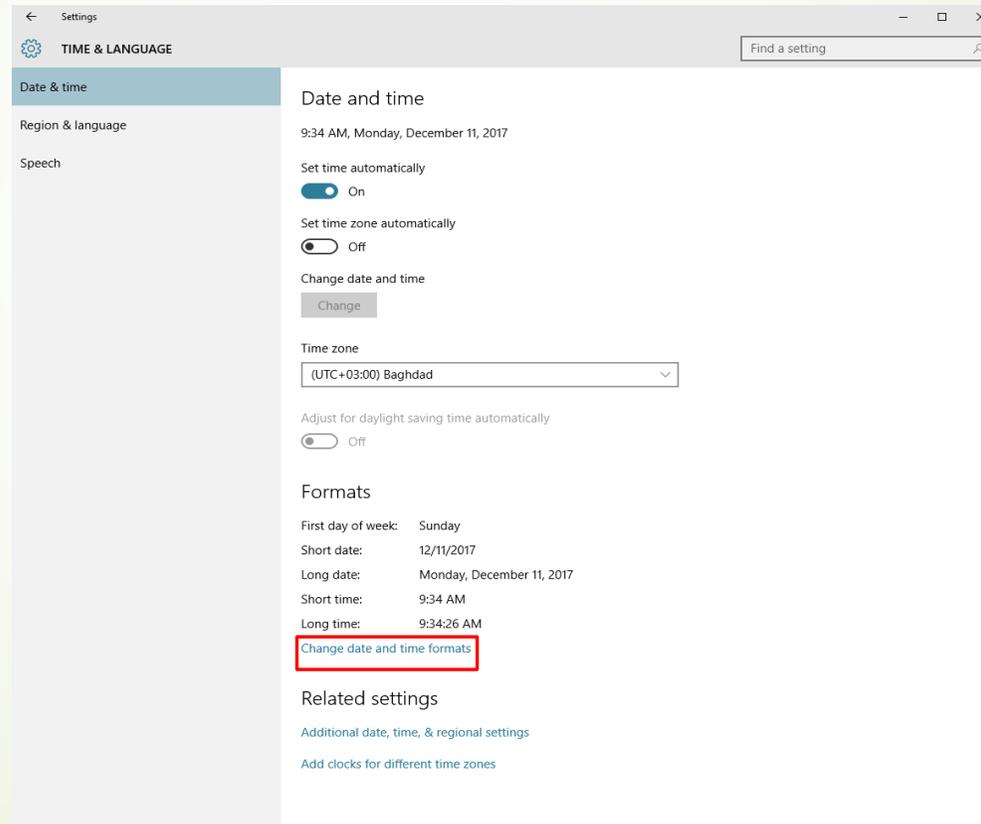
Date and Time

Through this query you can change the date and time, the following widows show you how to change it.

3



2



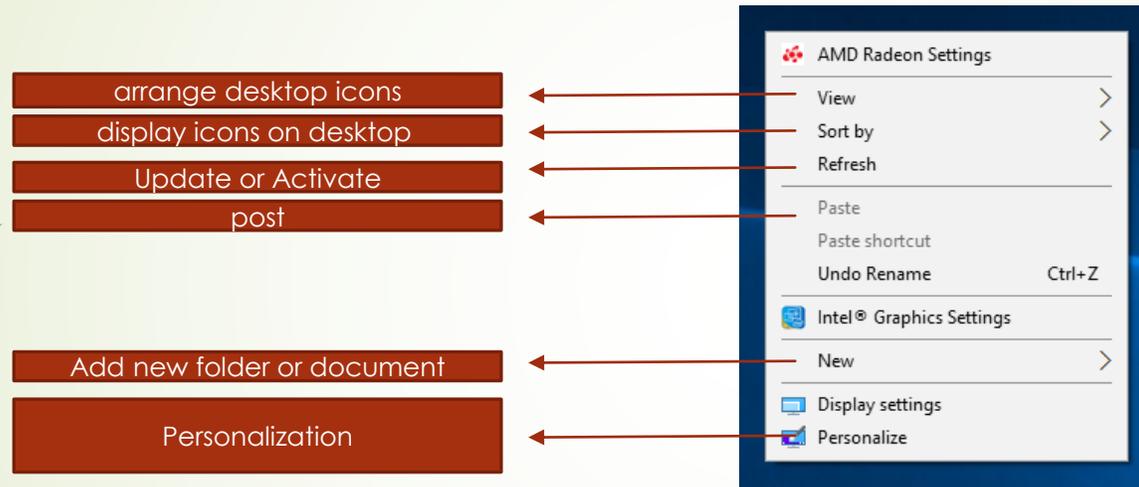
1



Mouse

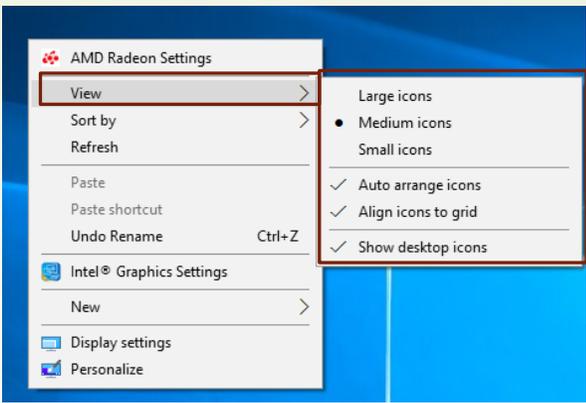
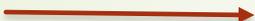
It is an input device, that contains three main parts which are:

1- Right click which is responsible of showing lists.

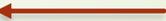




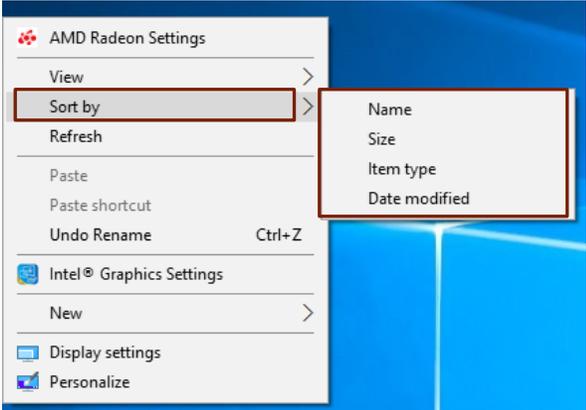
Main list



Drop list
To control on the size, arrangement, show and hide desktop icons



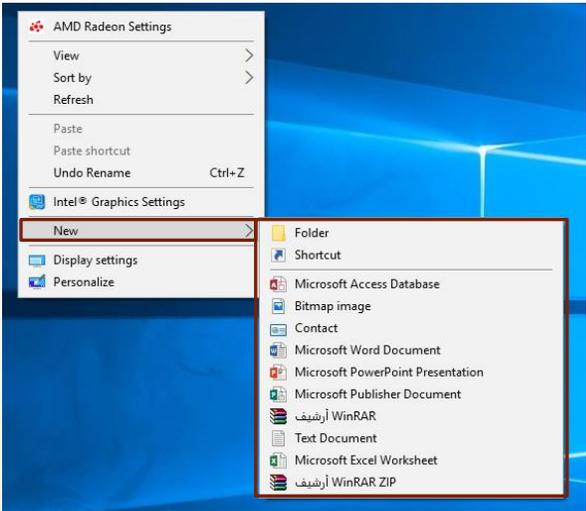
Main list



Drop list
Contains options to sort icons depending on different standards



Main list



Drop list
to create folders or documents



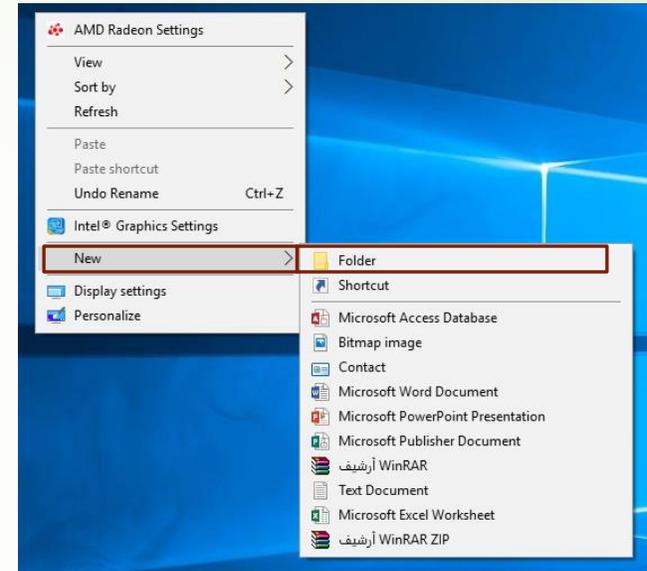
- 
- 2- Left click which is used to do operations and select files.
 - 3- Scroll which is used to move up and down among the page.

How to open icon or folder:

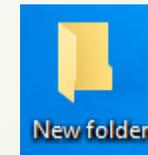
- 1- Double click on the selected (file, program or folder).
- 2- Right click on the selected (file, program or folder) and choose open.
- 3- Select the (file, program or folder) and click Enter.

How To create new folder?

- 1- Right click on any empty place.
- 2- Select New from the list.
- 3- choose folder.



Picture of the new folder after creation



How to rename folder?

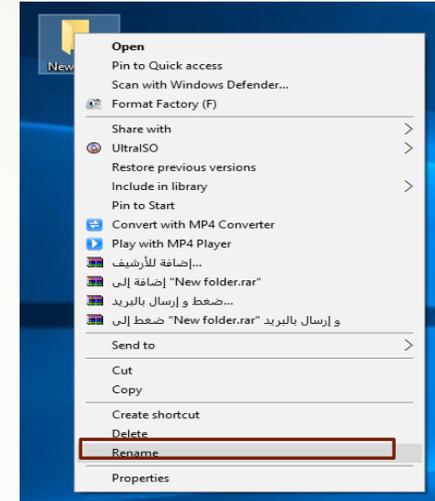
First way

- 1- Right click on the folder.
- 2- Select rename from the list.
- 3- type the name you want.

second way

- 1- Click f2 from the keyboard
- 2- type the name you want

Picture of the folder after naming



Copy

It is a command that allows you to copy data, such as text, image or a folder.

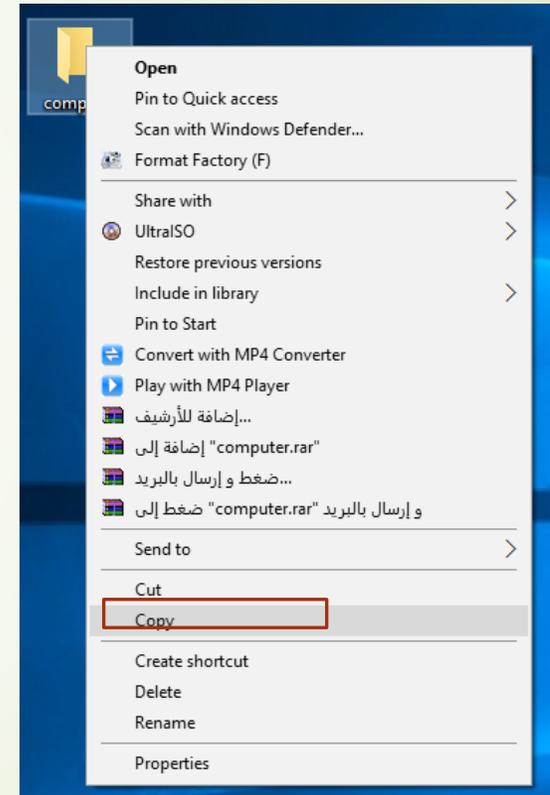
To copy a data there are two ways:

First way

- 1- Right click on the selected Item.
- 2- Select copy from the list.

Second way

From the keyboard select Ctrl and C at the same time.



Cut

Cut process is very similar to copy process in that they both place the selected item into the clipboard for future pasting. But the difference is that, when you **Cut** the selected item, it will remove, or cut.

To cut a data there are two ways:

First way

- 1- **Right click** on the selected Item.
- 2- Select **Cut** from the list.

Second way

From the keyboard select **Ctrl** and **X** at the same time.



Paste

It is a command that allows you to insert data from the clipboard into an application. In order to use the Paste command, you must first use either the Copy or Cut command to save data to the clipboard.

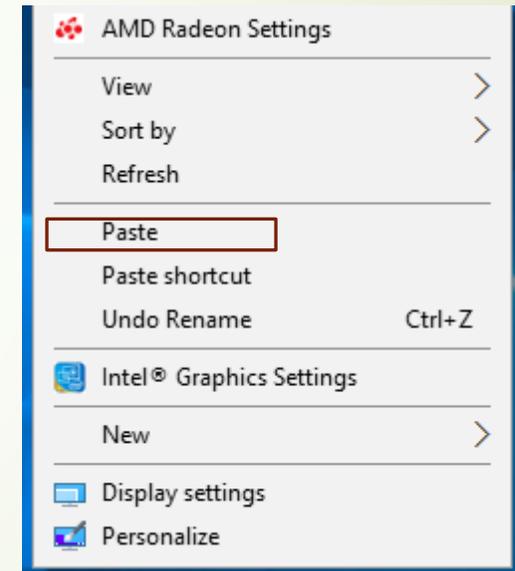
To paste a data there are two ways:

First way

- 1- Right click on any empty place.
- 2- Select Paste from the list

Second way

From the keyboard select Ctrl and V at the same time.



Delete

there are five ways to delete an item:

1

1- Right click on the selected item.

2- Select Delete from the list.

2

From the keyboard select Ctrl and D at the same time.

3

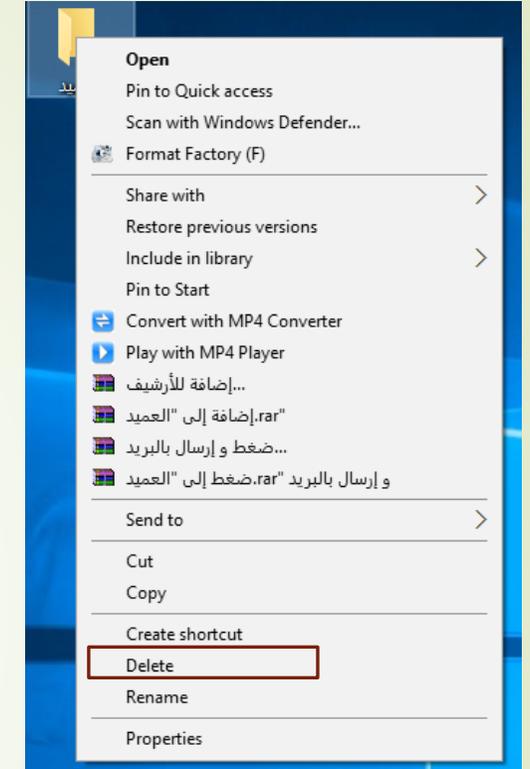
From the keyboard select Shift and Delete at the same time.

4

From the keyboard select Delete.

5

Drag the selected item and drop it on your hard drive.



How to move an item on your hard drive

1

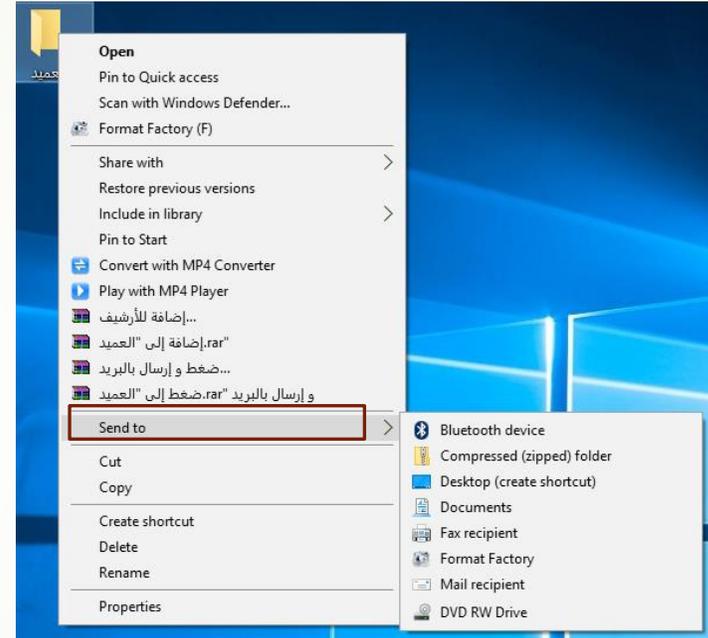
- 1- Right click on the selected item.
- 2- Select Send to
- 3- choose the place you want to put your item.

2

Use cut command.

3

Use drag and drop process

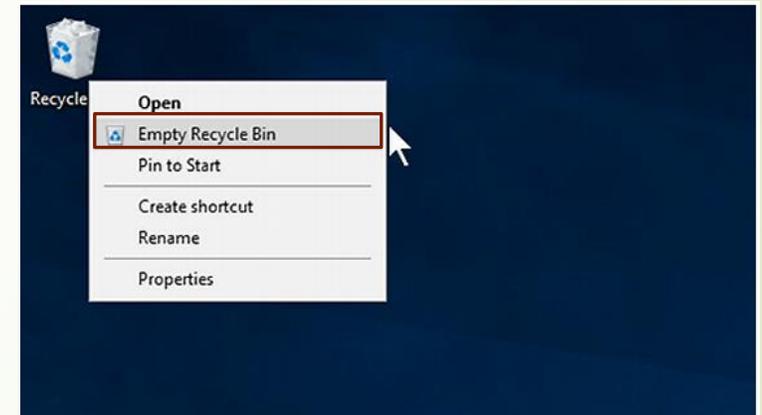


Recycle Bin

When you delete a file or folder in Windows, it is placed in the Recycle Bin. Items are temporarily stored in the Recycle Bin before they are permanently deleted by the user. The Recycle Bin is located on the Windows desktop.

How to clear the recycle bin ?

- 1- Find the Recycle Bin icon on the desktop.
- 2- Right click and select **Empty Recycle Bin**.



Restore

You can restore your files or folders from the recycle bin so easily by :

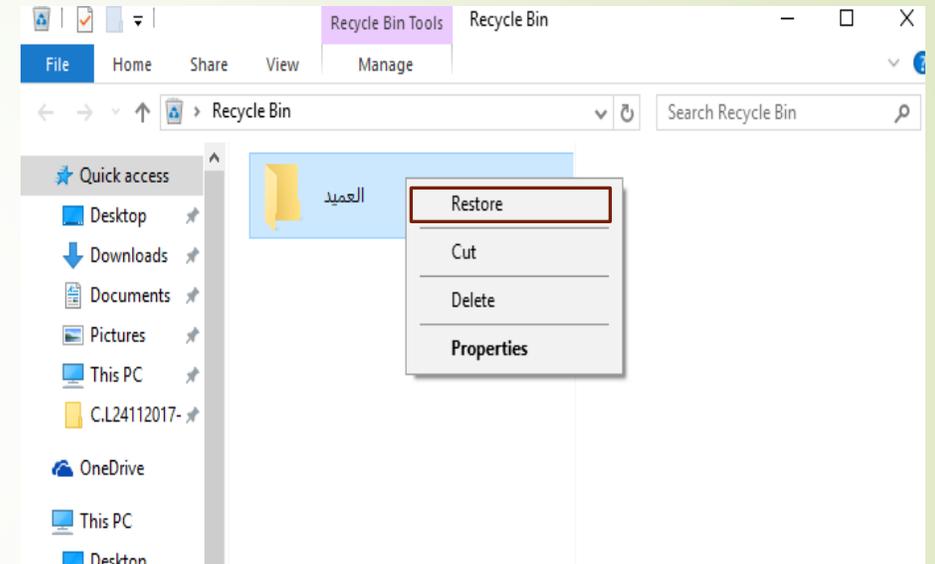
1

1- Select the item you want to restore.

2- Right click on it and choose restore.

2

drag and drop the item.

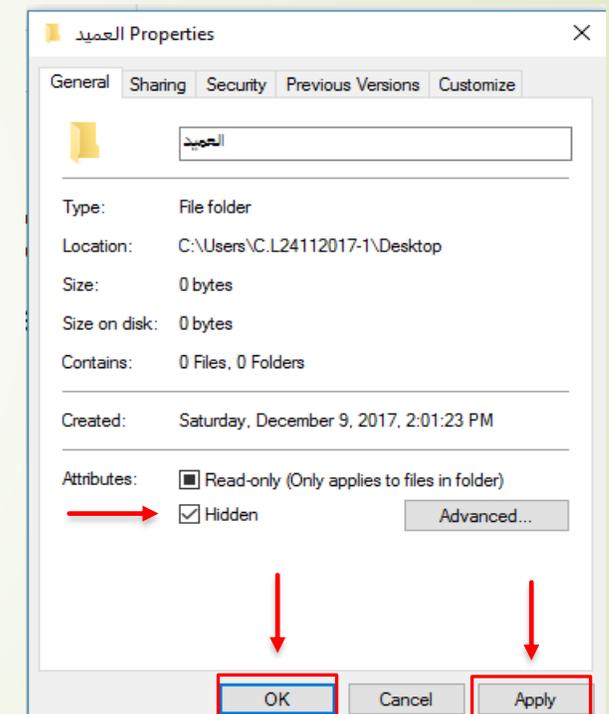
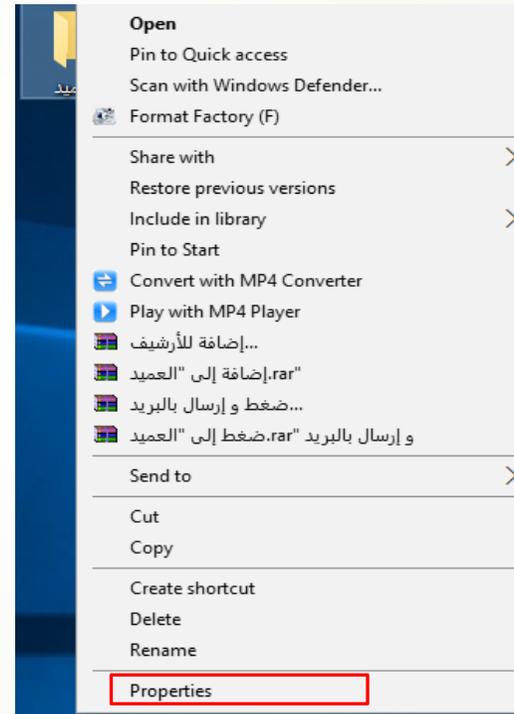


Hide a folder

This command allows you to hide a file on your hard disk.

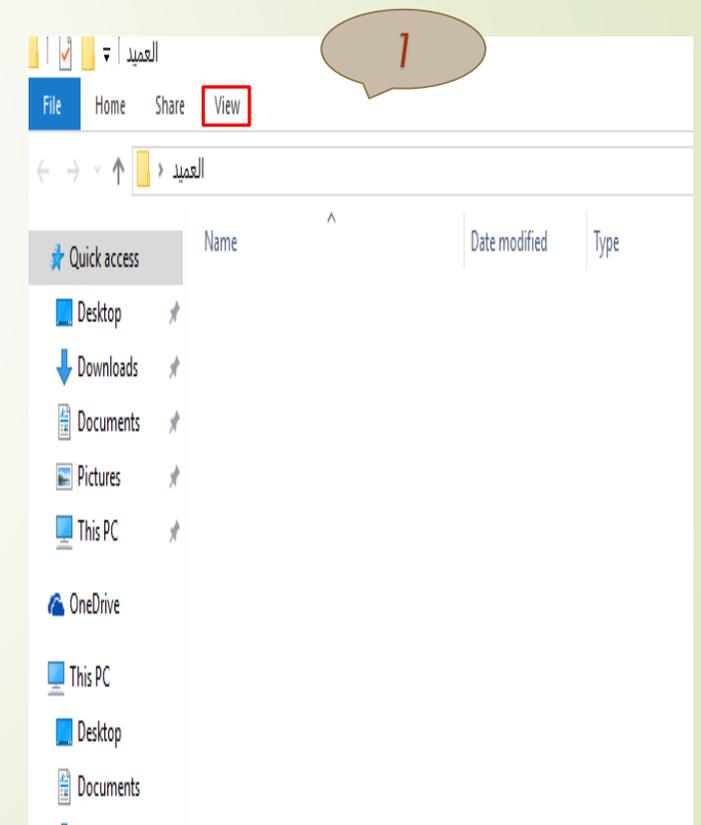
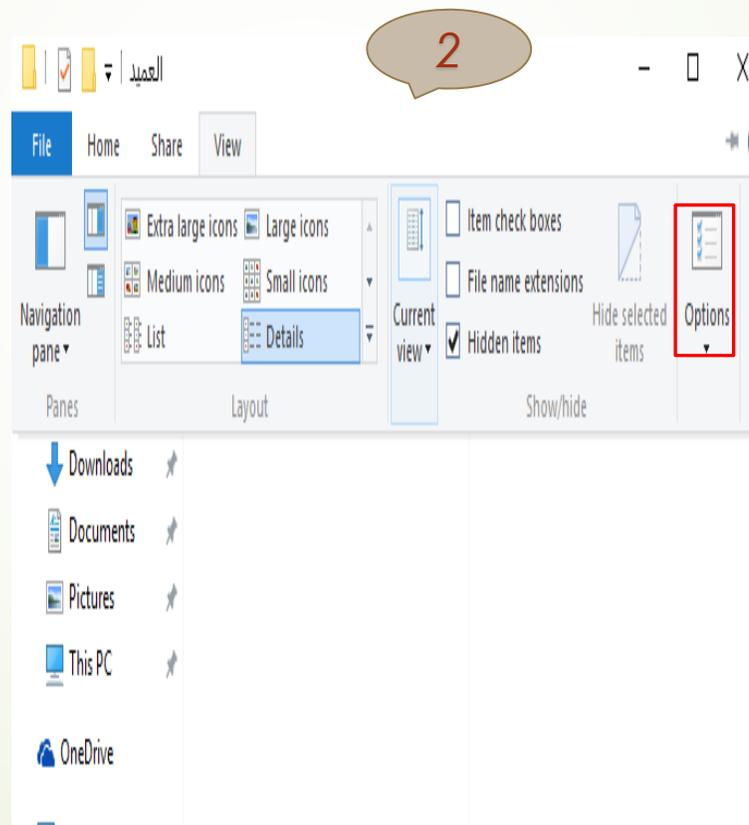
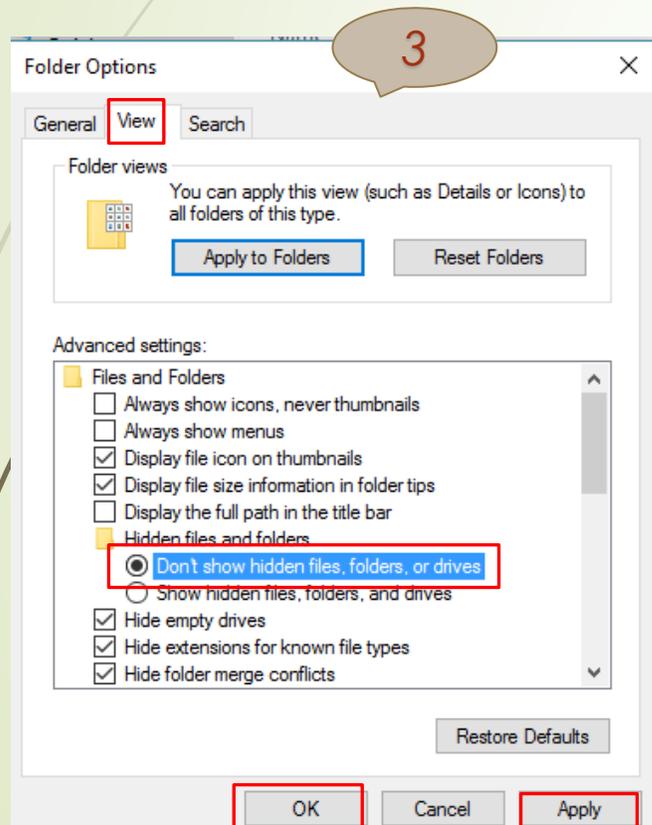
To hide a file temporary:

- 1- Right click on the selected folder.
- 2- Select properties from the list.
- 3- check Hidden button.
- 4- click apply then ok.



To Hide a file permanently:

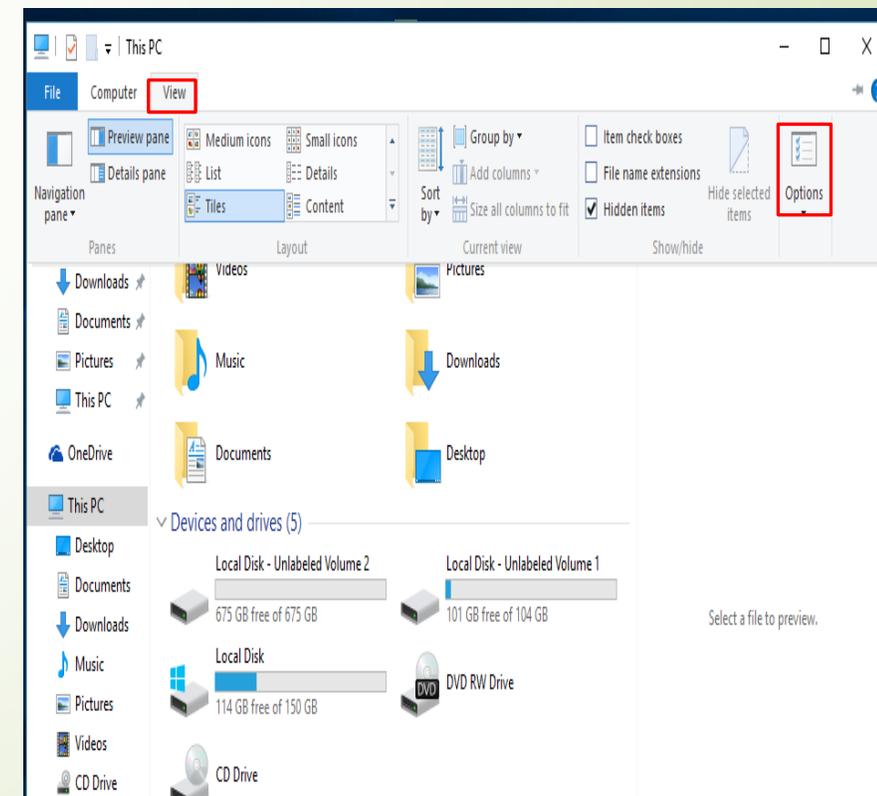
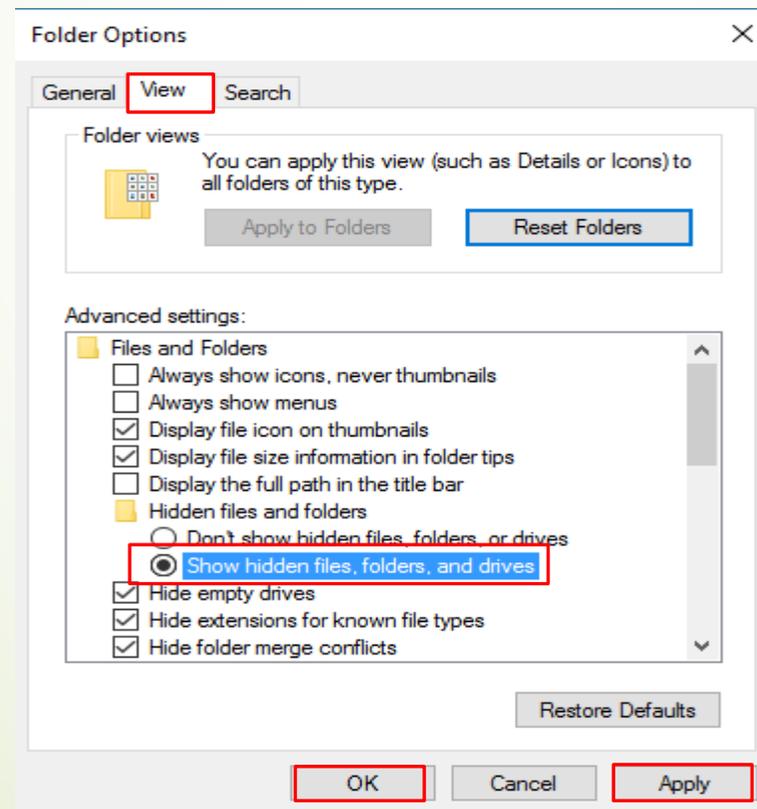
- 1- open the selected folder.
- 2- select View from the toolbar.
- 3- Go to options.
- 4- choose view and select Don't show, click apply, then ok.



To show a folder

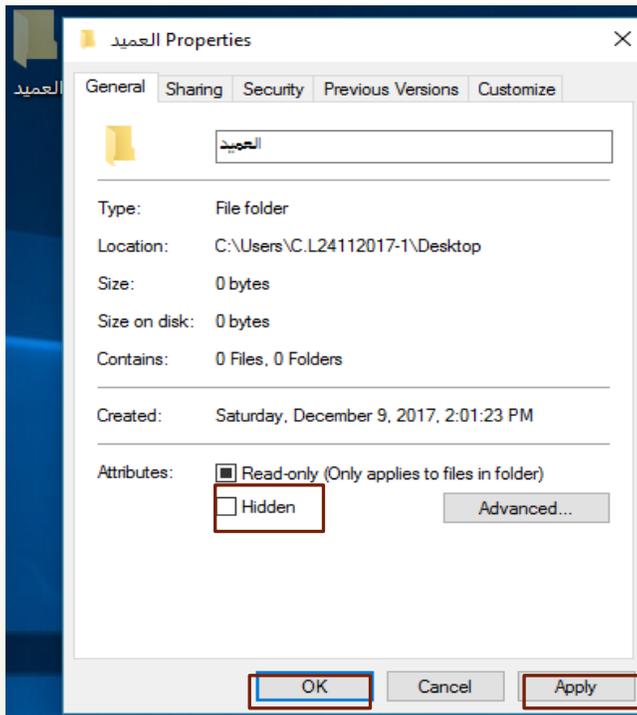
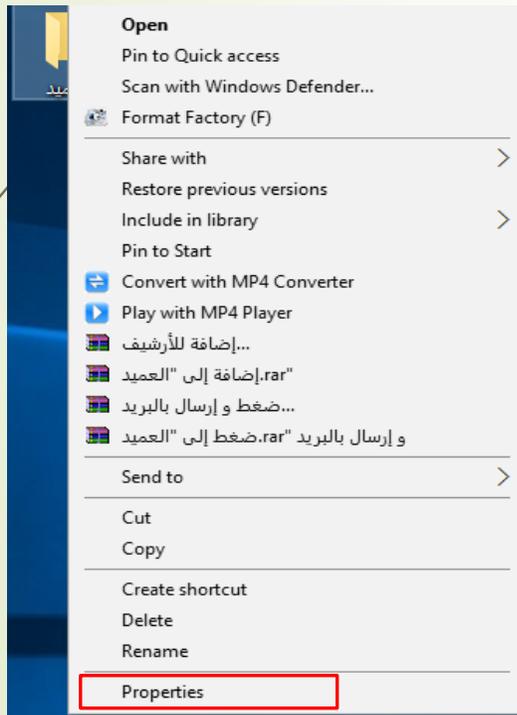
- 1- Open any window.
- 2- select **View** from the toolbar.
- 3- Go to options.
- 4- choose view and select **Show**, click apply, then ok.

Finally, the folder
Will appear like this



In order to return the folder to the original status:

- 1- Right click on the selected folder.
- 2- Select properties from the list.
- 3- remove check from the Hidden button.
- 4- click apply then ok.



Finally, the folder return to the original look





Thank you ^_^