

Computer Application

Chapter 1 – Part 1: Operating System

Practical Session

Windows 10 OS

- Windows 10 is a modern computer operating system and graphical user interface (GUI), which enables a user to work with a wide variety of programs on a computer, simultaneously.



- Before GUIs, computers had a command-line interface, which meant users had to type every single command to the computer and the computer would only display text

```
C:\>dir
Volume in drive C is MS-DOS_6
Volume Serial Number is 40B4-7F23
Directory of C:\

DOS              <DIR>          12.05.20  15:57
COMMAND   COM            54 645 94.05.31  6:22
WIN32O  386            9 349 94.05.31  6:22
CONFIG   SYS            144 12.05.20  15:57
AUTOEXEC BAT           188 12.05.20  15:57
                           5 file(s)      64 326 bytes
                           24 760 320 bytes free

C:\>_
```

- Windows allow viewing programs, folders and files.
- The user can operate different applications at the same time by moving and resizing Windows .

Windows 10 OS

➤ Minimum Requirements:

If you want to run Windows 10 on your PC,

here are the minimum hardware requirements:

- ✓ **Processor:** 1 GHz or faster.
- ✓ **RAM:**
 - 1 GB (for Win 32-bit)
 - 2 GB (for Win 64-bit)
- ✓ **Hard Disk space:** 16 GB (for Win 32-bit)
 - 20 GB (for Win 64-bit)



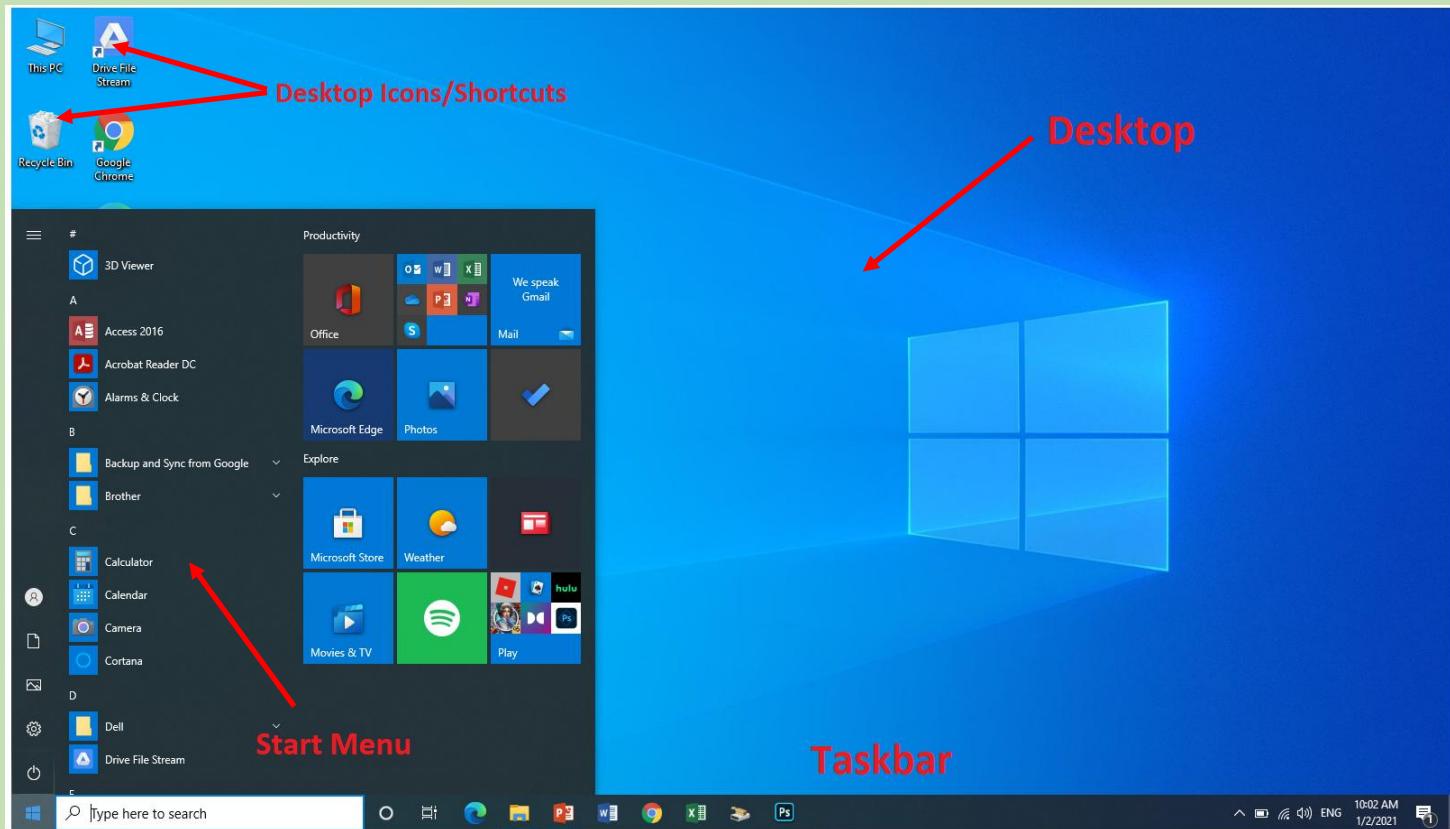
Windows 10 OS

➤ Start Menu:

- ✓ User Options
- ✓ Documents
- ✓ Pictures
- ✓ Settings
- ✓ Power Options
- ✓ Programs

➤ Desktop Icons:

- ✓ My Computer
- ✓ Recycle Bin
- ✓ Files & Folders
- ✓ Shortcuts



➤ Taskbar:

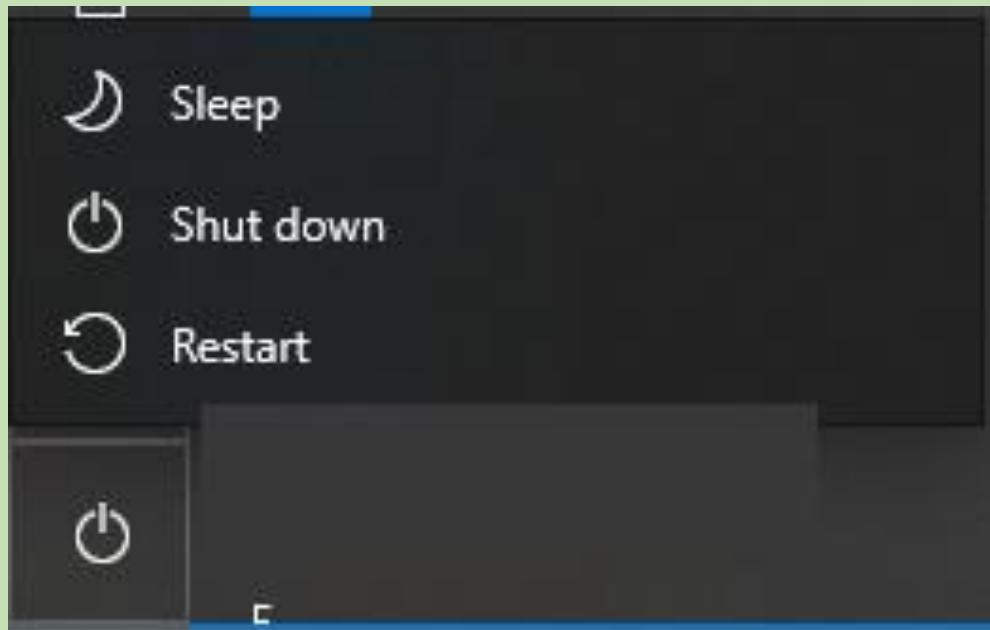
✓ Search	✓ Power Stats	✓ Date&Time
✓ Programs	✓ Language	✓ Notifications

Windows 10, Start Menu (1)

➤ Power

✓ Sleep:

- PC stays on.
- PC uses Low Power.
- Apps stay open.



✓ Shut Down:

- Closes all Apps
- PC turns off.

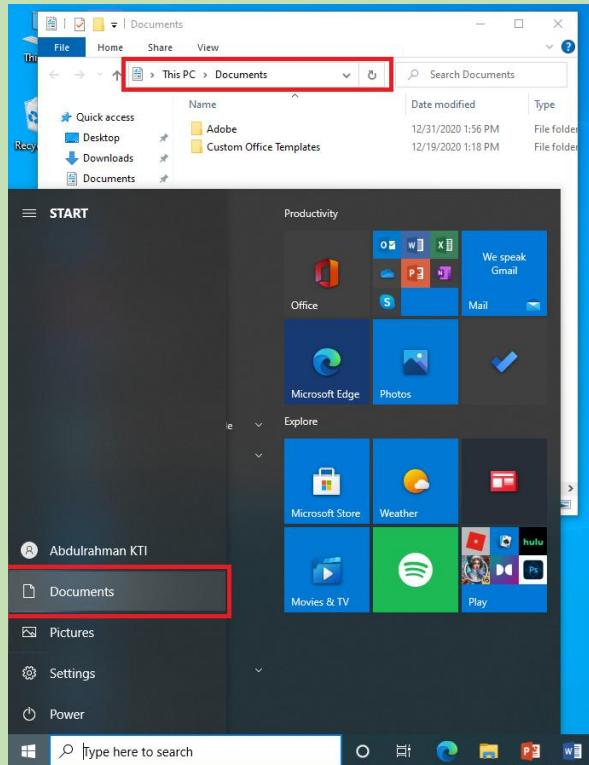
✓ Restart:

- Closes all Apps
- PC turns off **Then** turns on again.

Windows 10, Start Menu (2)

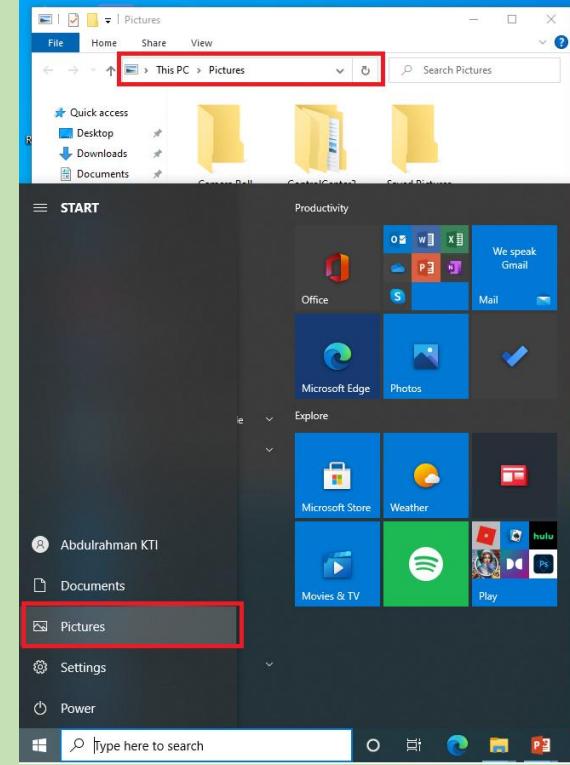
➤ Documents

- ✓ Clicking on Documents
will Open a Folder
“This PC —> Documents”



➤ Pictures

- ✓ Clicking on Pictures
will Open a Folder
“This PC —> Pictures”



Windows 10, Start Menu (3)

➤ User Options

✓ Lock:

- Locks the current user account.
- Opened programs remain active.
- The User must “Sign in” again to continue working.

✓ Sign out:

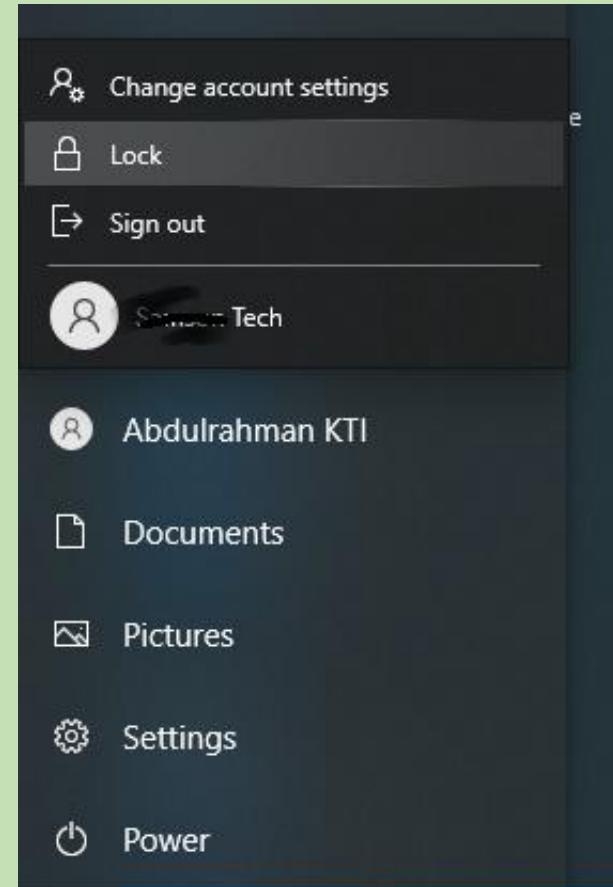
- Closes the current user account.
- Opened programs will be closed.

(Changes must be saved or it will be lost).

- The user must “Sign in” again to continue working.

✓ Change account settings:

- User Information.
- Email & Accounts
- Sign-in Options
- Access work or School



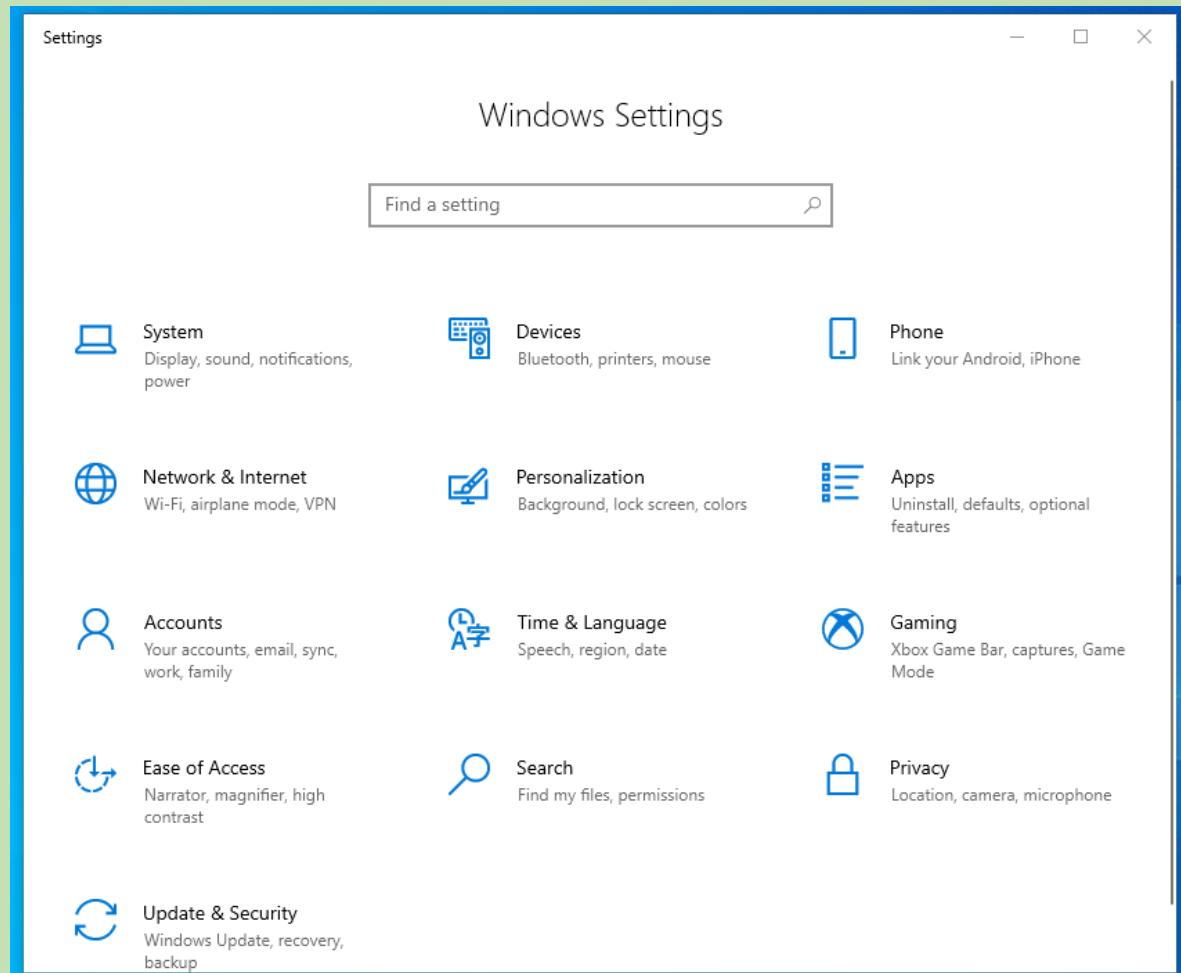
- Family & Other Users
- Sync user settings

Windows 10, Start Menu (4)

➤ Settings

✓ Windows Settings menu will be opened. The User can change the settings of:

- System
- Devices
- Phone
- Network & Internet
- Personalization
- Apps
- Accounts
- Time & Language
- Gaming
- Ease of Access
- Search
- Privacy
- Update and Security

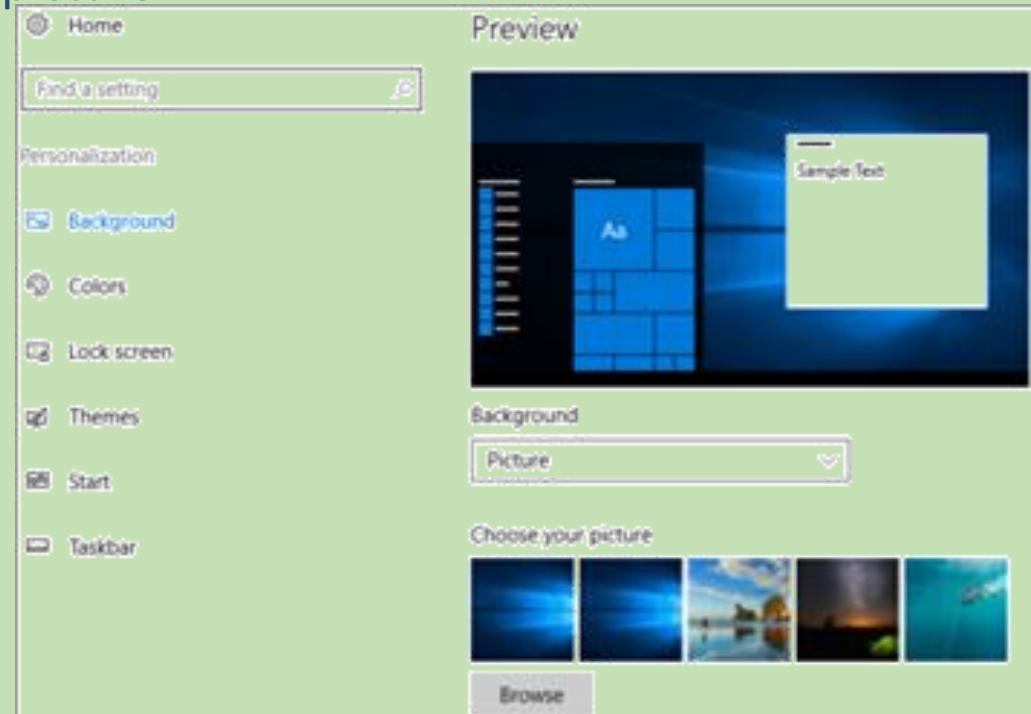
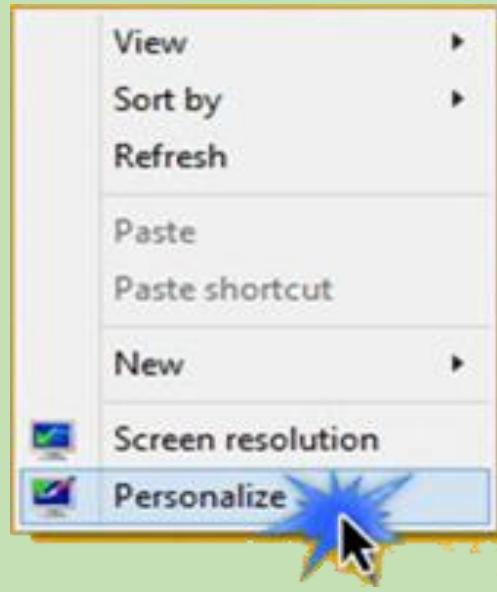


Win 10, Desktop Background

➤ Win 10 user can change desktop background:

- ✓ Right-click in any blank area on the **Desktop**
- ✓ Select **Personalize** to open its options.
- ✓ Select a default Win **Background** pictures

Or **Browse** to select a stored picture



Win 10, Desktop Icons (1)

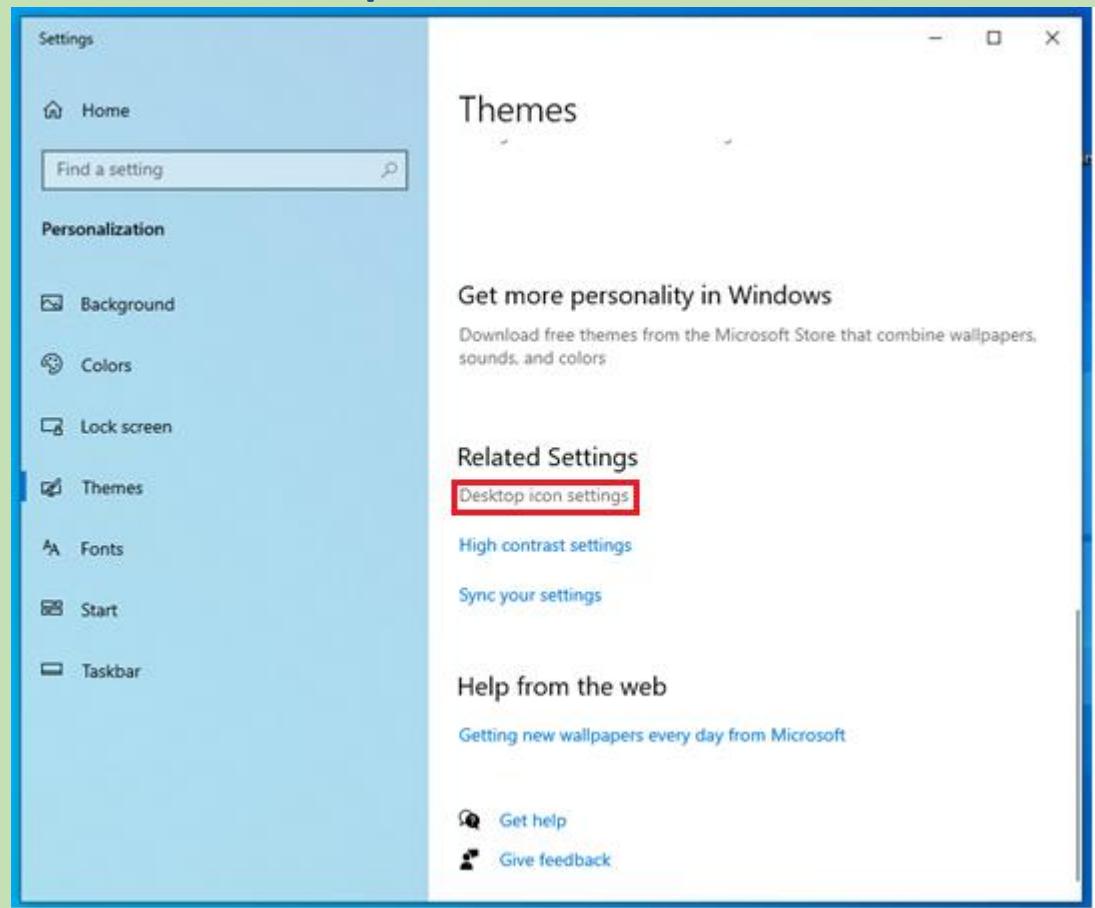
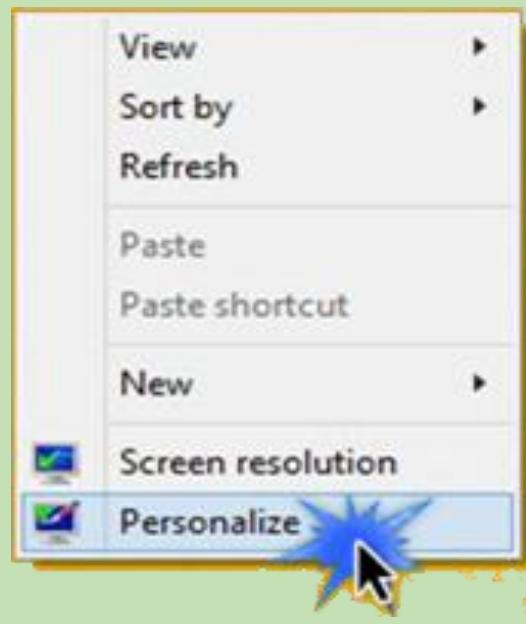
➤ Win 10 user can change desktop Icons:

✓ Right-click in any blank area on the Desktop

✓ Select Personalize

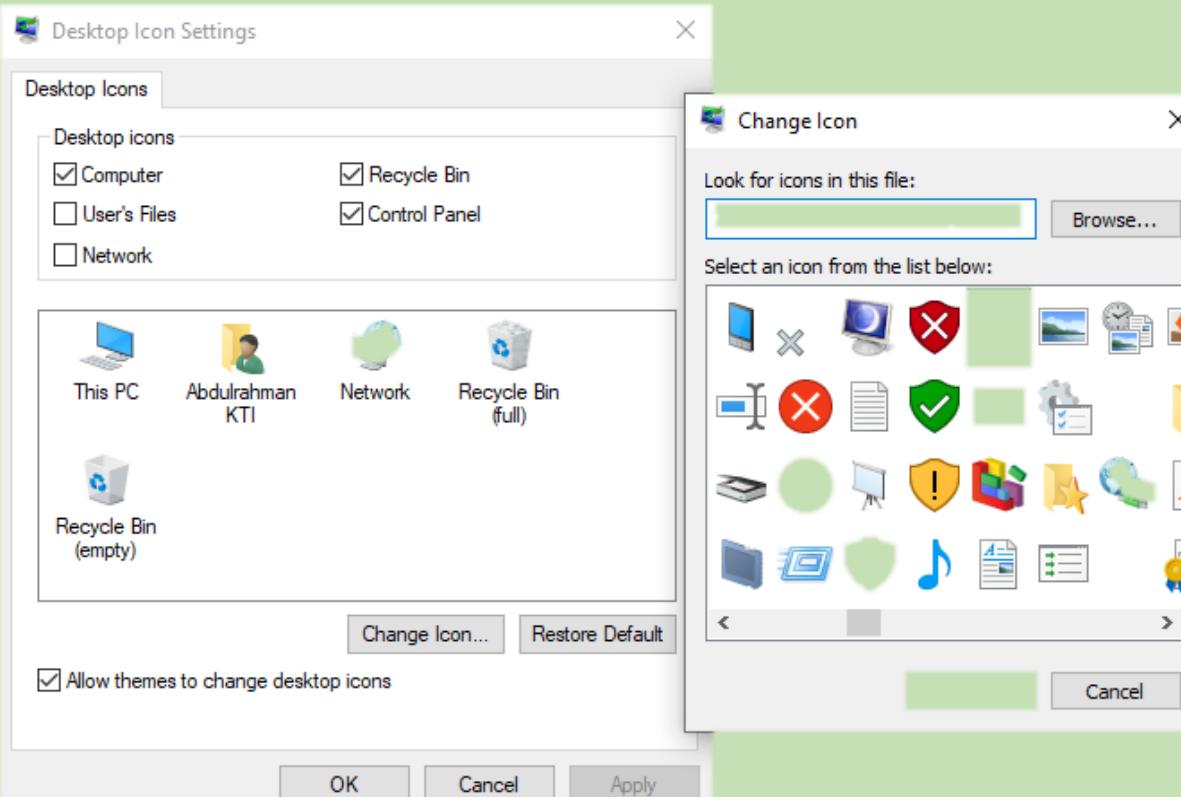
✓ Select Themes to Change

Desktop Icon Settings



Win 10, Desktop Icons (2)

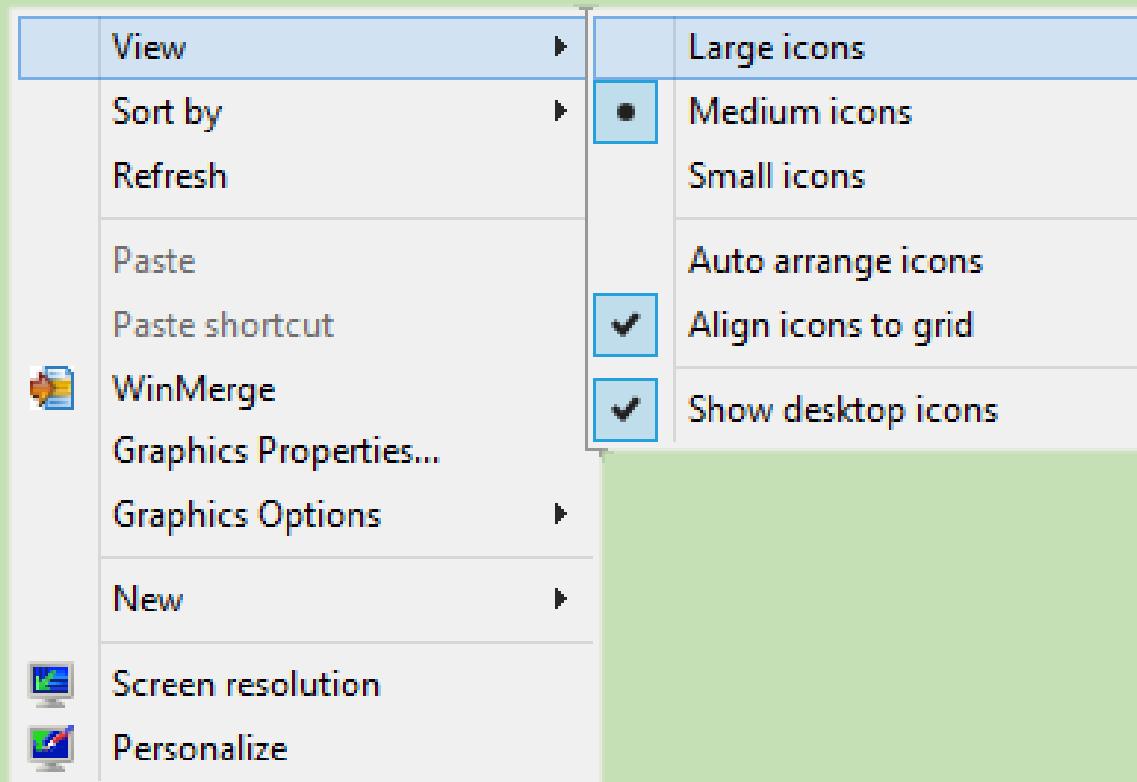
- Win 10 user can change desktop Icons:
 - ✓ The user can select the **Desktop Icons**
 - ✓ The user can **Change Icons**
 - ✓ The user can cancel the changes be selecting **Restore Default**



Win 10, Desktop Icons (3)

➤ To change the size of Desktop Icons

RT-Click (on Desktop) Select View the Select Size (Large , Medium or Small)

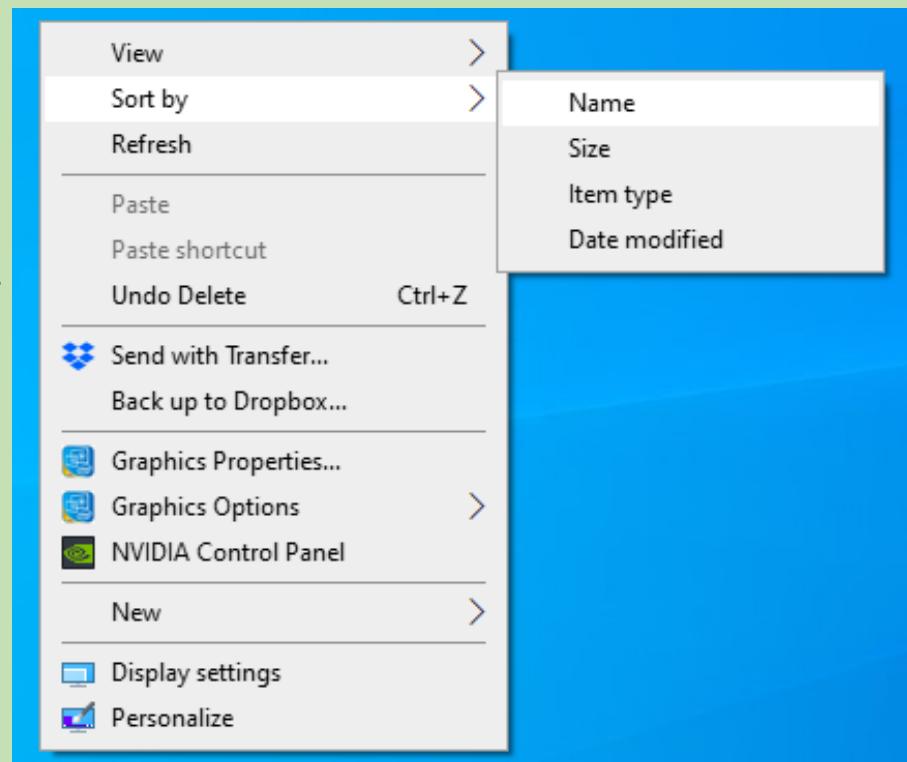


Win 10, Desktop Icons (4)

➤ Sort Desktop and line up icons

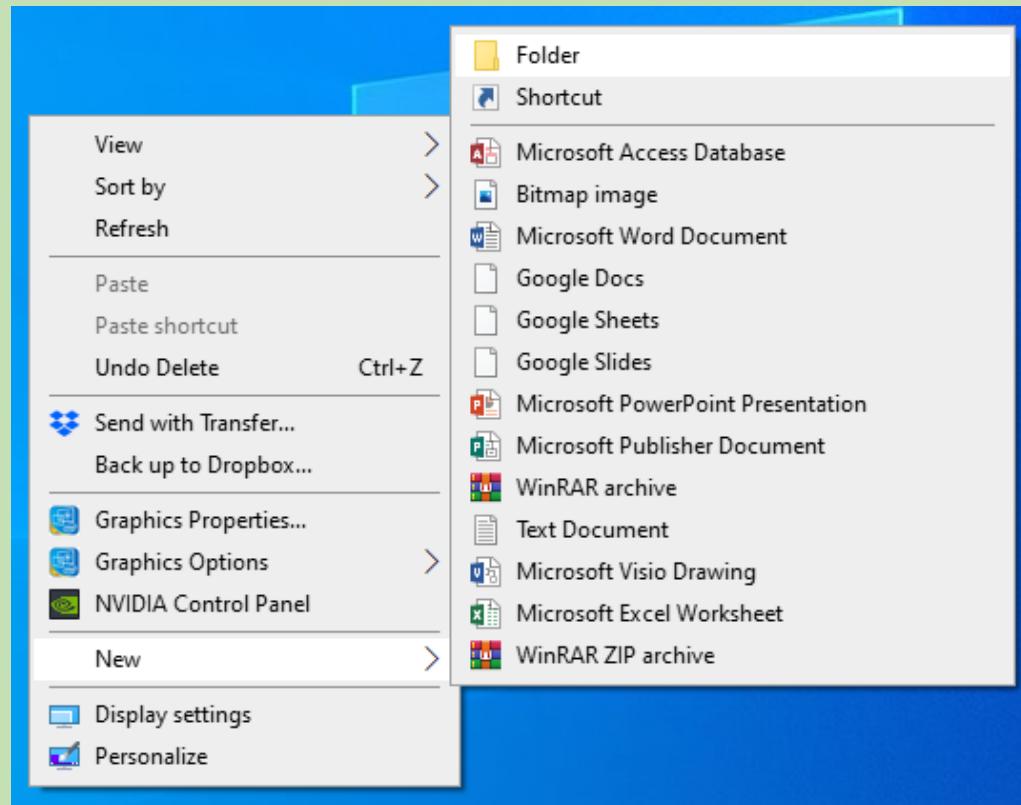
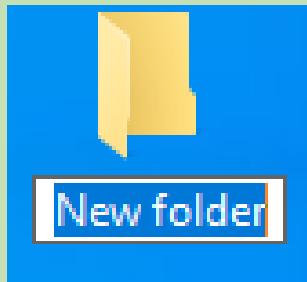
- ✓ RT-Click (on Desktop)
- ✓ The user can Sort Desktop (Icons, Files and Folders) by:

- ❑ **Name:** Arrange all icons in alphabetical order using neat, vertical rows
- ❑ **Size:** Arrange icons according to their sizes, placing the smallest ones at the top of the rows.
- ❑ **Item Type:** This lines up icons by their type. For example all photographs are grouped together.
- ❑ **Date Modified:** Arrange icons by the date you or your PC last changed them



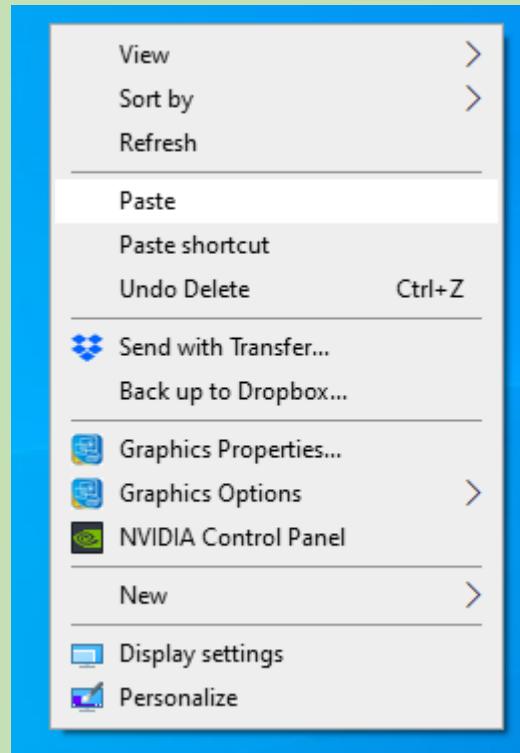
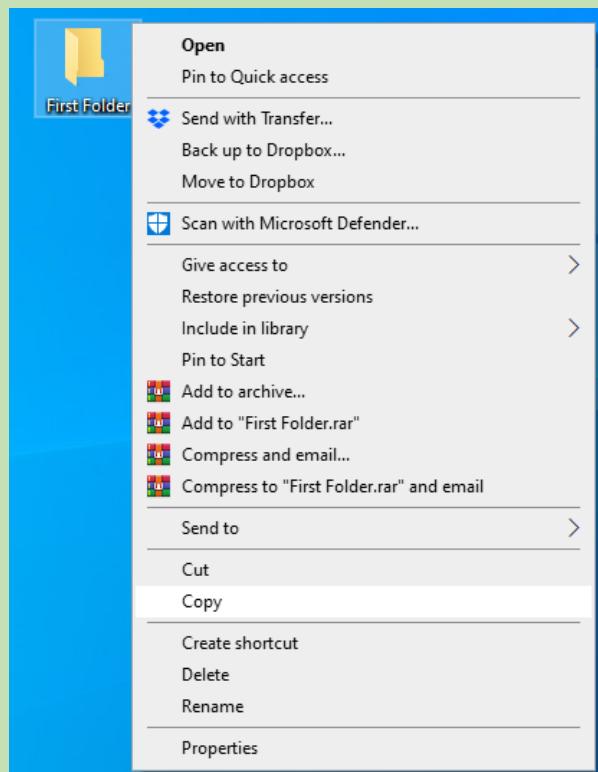
Folder Management (1)

- To create a new Folder
- ✓ Right-click in any blank area on the Desktop
- ✓ Select New
- ✓ Select Folder
- ✓ Then new folder's Name



Folder Management (2)

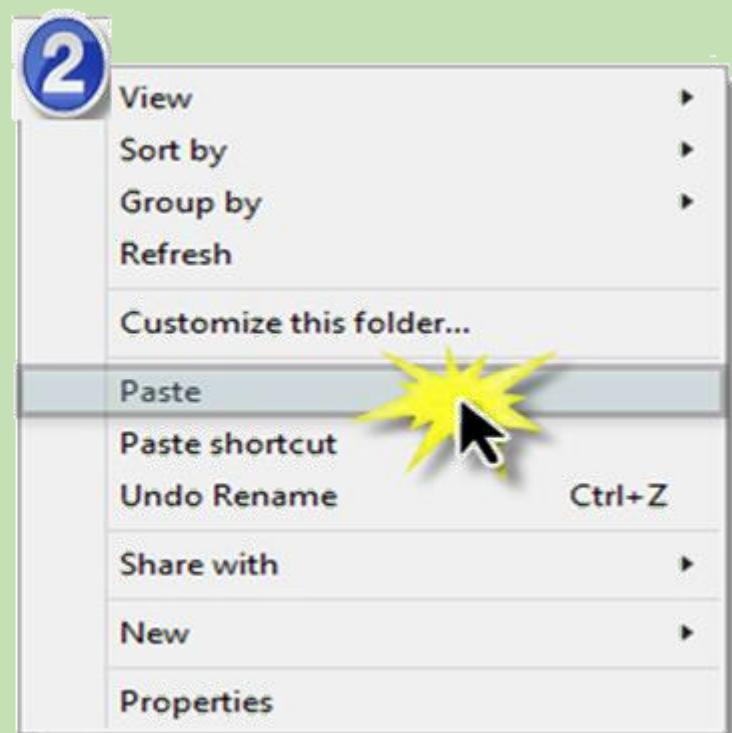
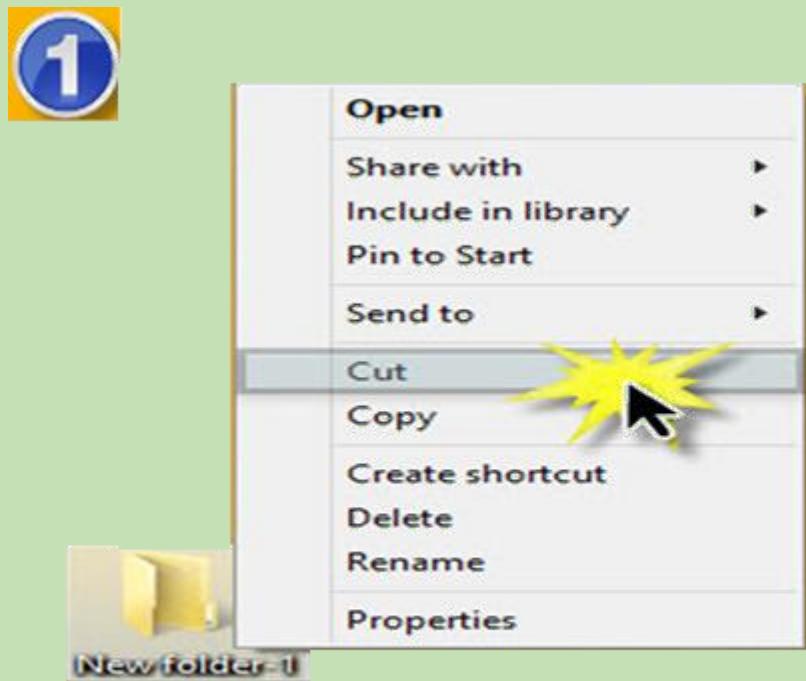
- To **Copy** a Folder
- ✓ Right-click on the folder you want to **Copy**
- ✓ Select **Copy**
- ✓ Right-click in blank area and select **Paste** type a name for the **copied** folder



Folder Management (3)

➤ To Cut a Folder

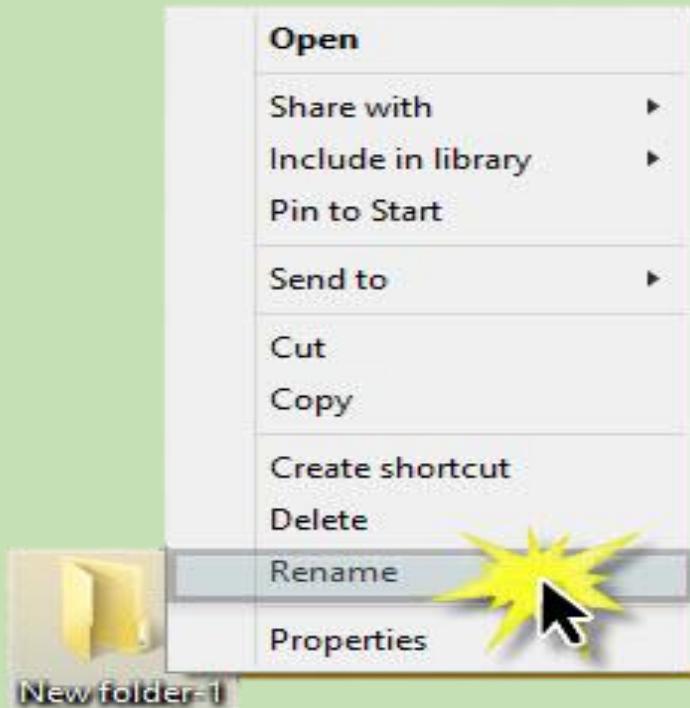
- ✓ Right-click on the **Folder** and select **Cut**
- ✓ Right-click in any blank area in desired location and select **Paste**



Folder Management (4)

To Rename Folder

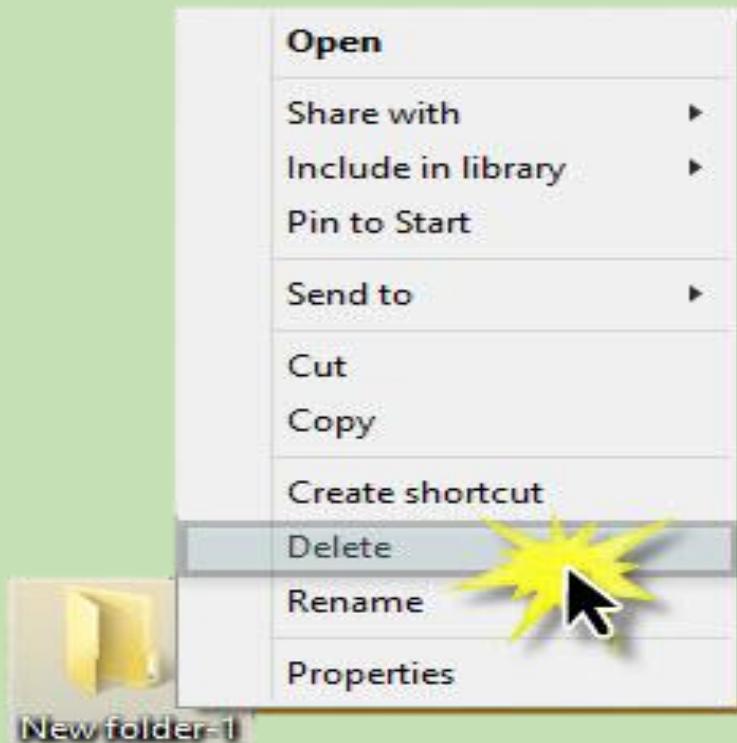
Right-click on the **Folder** and select **Rename**



Folder Management (5)

To Delete Folder

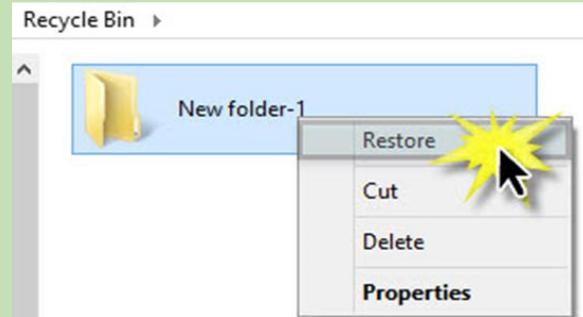
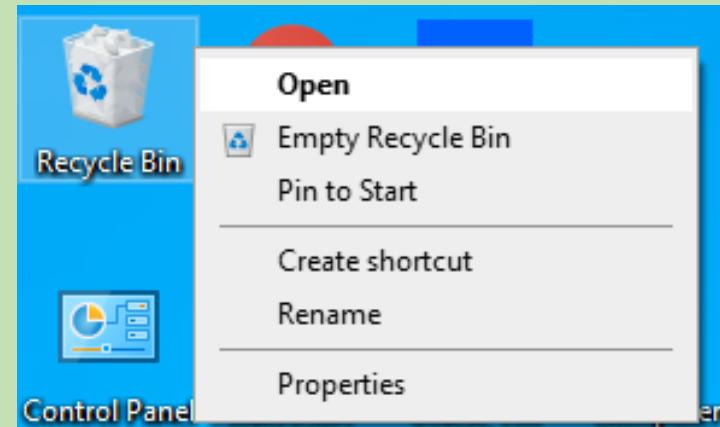
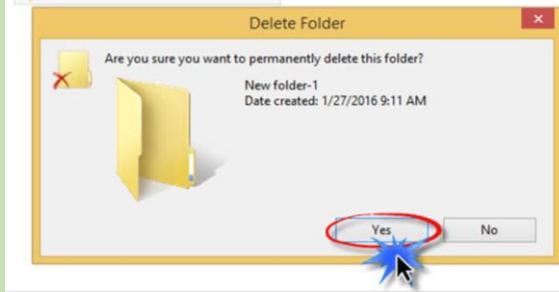
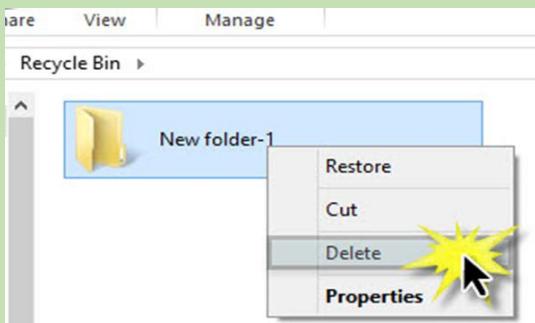
- Right-click on the **Folder** and select **Delete**
- After you deleted the folder, you can find it in the **Recycle Bin**



Folder Management (6)

To Delete Folder in the Recycle Bin

- ❑ Right-click on the **Recycle Bin** and select **Open**
- ❑ Right-click on the deleted Folder in **Recycle Bin** select **Delete** Click on **Yes** to delete it permanently



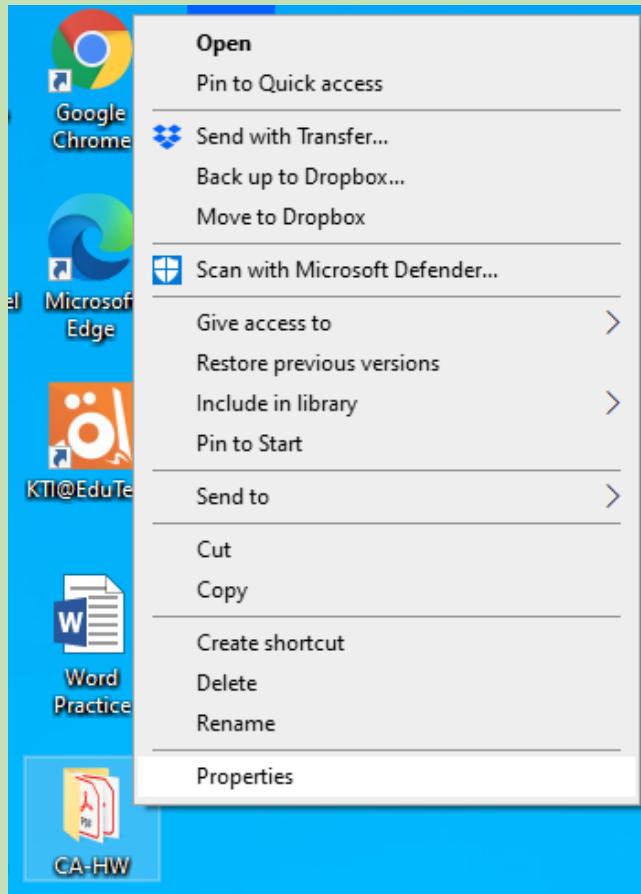
To Restore a Deleted Folder from Recycle Bin:

- ❑ Right-click on the deleted Folder in the **Recycle Bin** then select **Restore**, the deleted folder will be restored to its original location

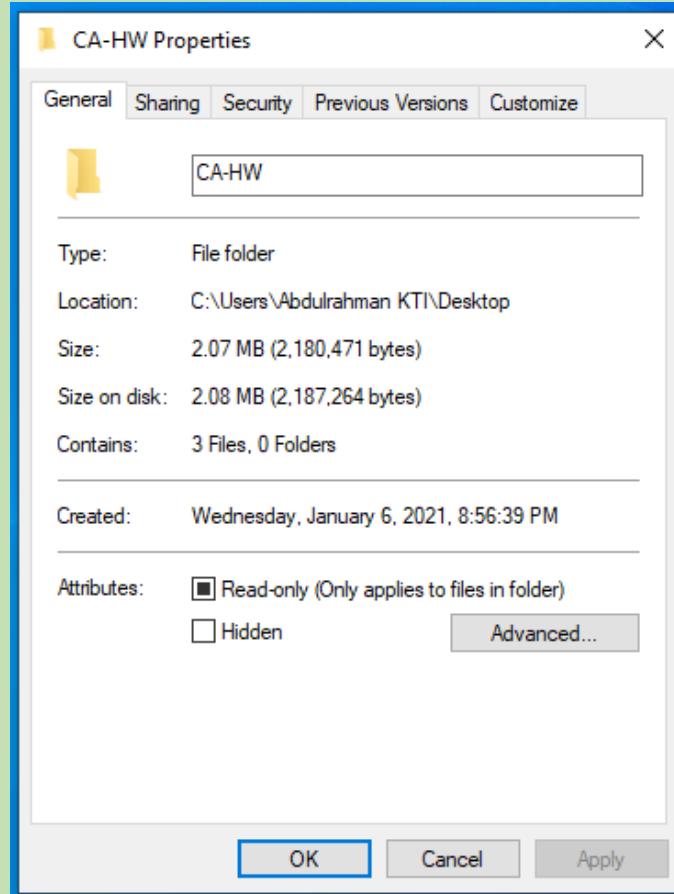
Folder Management (7)

To View Folder Properties:

- ❑ Right click on the **Folder** you want



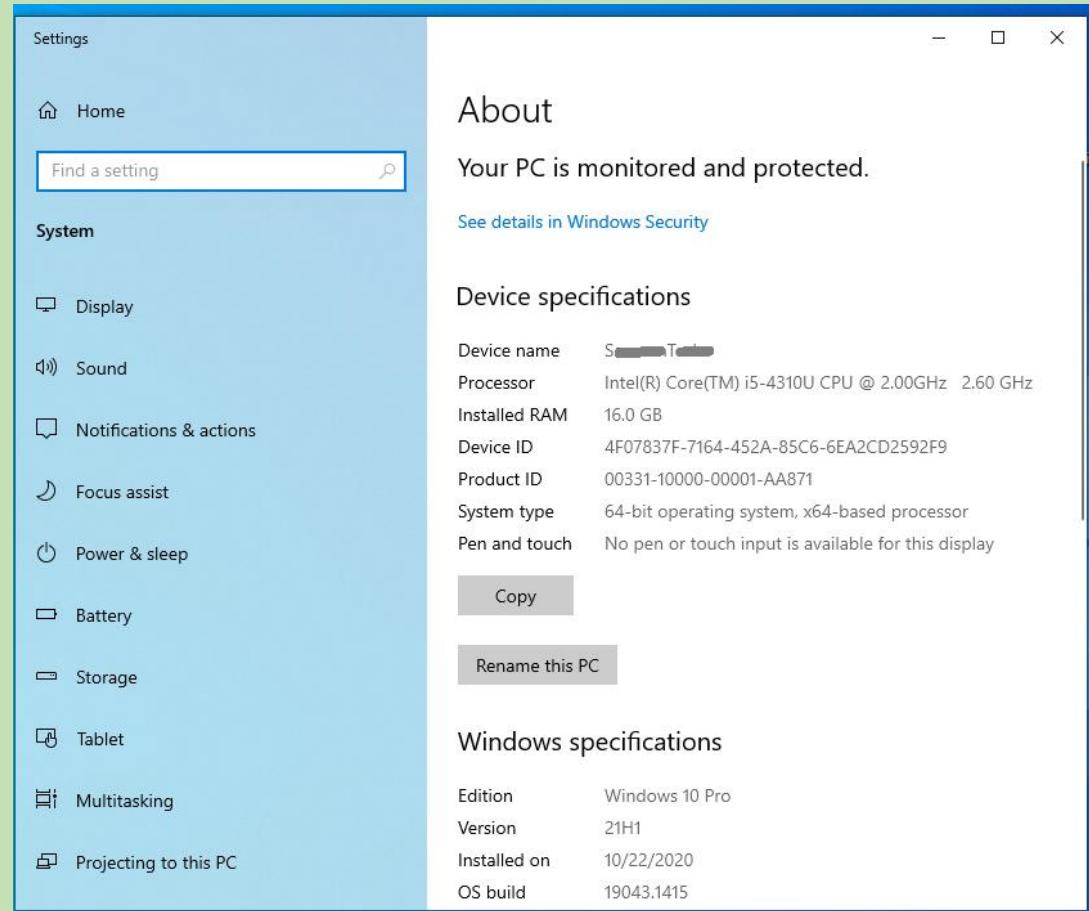
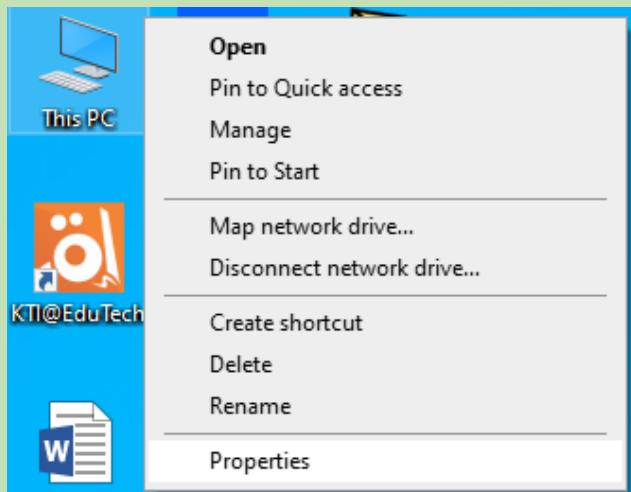
Select Properties



Computer Properties

To View Computer's Properties:

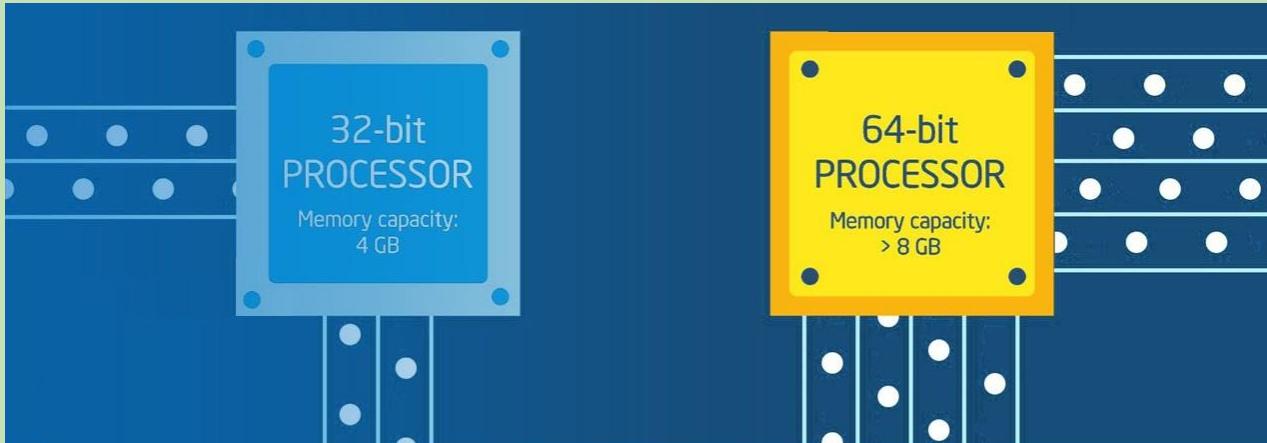
- ❑ Right click on the **This PC** icon
- ❑ Select **Properties** to:
 - ✓ View Device Specifications
 - ✓ View Windows Specifications
 - ✓ Rename PC
 - ✓ And more **Related Settings**



Difference between (32-bit) and (64-bit) OS

➤ 32-bit Operating System:

- ✓ Operating System is designed to run on a **32-bit Processor**.
- ✓ The computer can access maximum ($2^{32} = 4$ Giga Bytes) of RAM.
- ✓ Only a **(32-bit OS)** can be installed on a PC with **(32-bit Processor)**.



➤ 64-bit Operating System:

- ✓ Operating System is designed to run on a **64-bit Processor**.
- ✓ The computer can access a lot more than 4 GB ($2^{64} = 16$ Exa Bytes) of RAM.
- ✓ A **(32-bit) or (64-bit)** operating system can be installed on a PC with **(64-bit Processor)**.

Storage Devices

Different **Devices** are used to store files and folders in MS Windows, such as:

- **Hard Disk:** usually can be found inside the computer and all the programs installed on the computer , data files and user files are stored in it
- **CD-RW (Compact Disk-Re-writeable):** is used to store data files or user files. It is **portable** which means you can take then wherever you want
- **DVD-RW (Digital Versatile Disk or Digital Video Disk Re-writeable):** these devices are similar to CD-RW but they can store **larger** amounts of data than CD-RW
- **USB Flash Drive:** is an external and **portable** device that can be connected to the computer using USB ports
- **Network Drive:** this device is used to store files that are shared between several users.

Types of Files

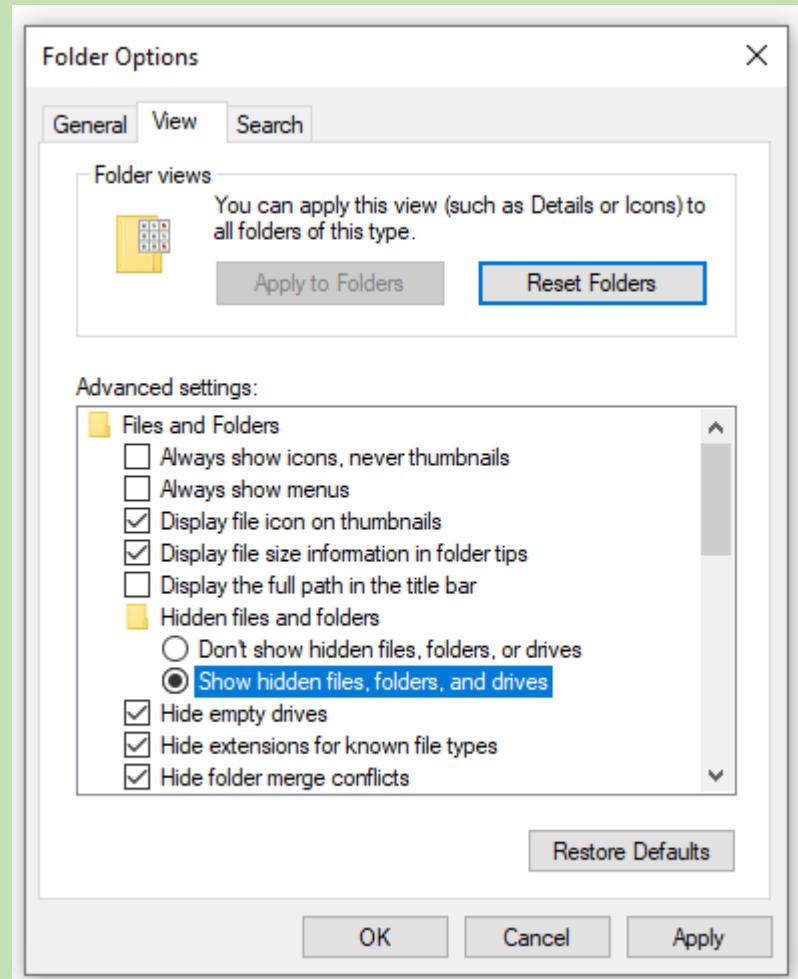
A file name ends with 3 characters that are called the *extension*. These three characters are separated from the file name by period (•)

Extension	Description
.jpg, .png, .gif	Graphics, pictures
.doc, .docx	Word processing file
.xls, .xlsx	Spreadsheet
.ppt, .pptx	PowerPoint slideshow
.txt	Text file
.pdf	Portable document file
.htm, .html	Web pages, etc.
.wav	Audio file
.mp3	Audio file
.avi	Video clip
.rm, .mp4, .mpg	Video clip
.exe	Executable file
.zip	Compressed file

Show Hidden Files

➤ The user can Show the **Hidden** (files, folders and Drives) in a Computer by:

1. Open This PC.
2. From View Menu choose Options.
3. Open View from Folder Options menu.
4. Select (Show hidden files, folders, and drives).
5. Click Apply then Close.



Show File Extensions

➤ By default Windows hides file name extensions,
but Windows User can make them visible by:

1. Open **This PC**.
2. From **View** Menu choose **Options**.
3. Open **View** from **Folder Options** menu.
4. Click **View** tab.
5. Uncheck selection Box next to:
"Hide extensions for known file types"
6. Click **Apply** then Close.

