

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
WINA20      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)



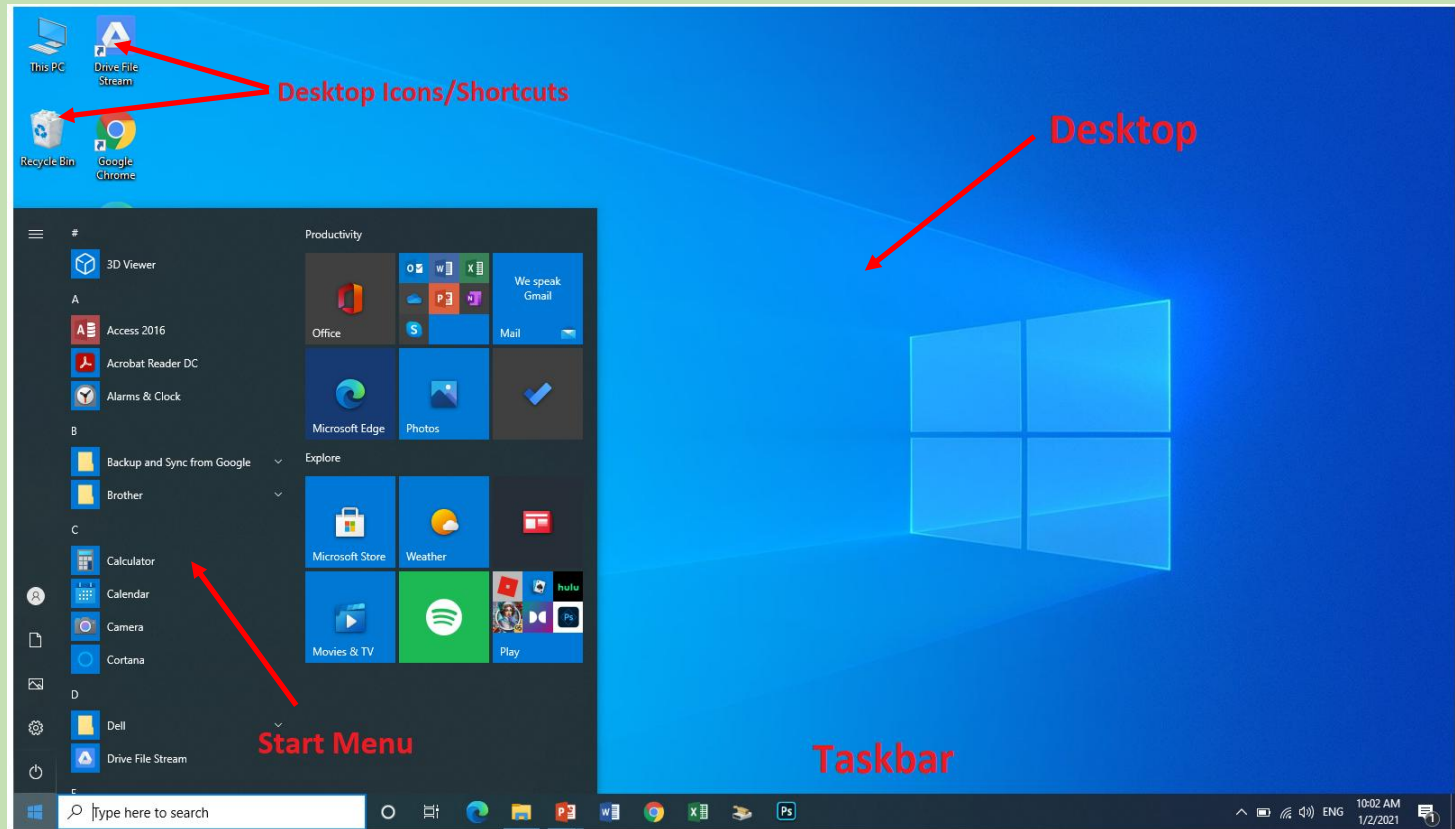
Windows 10 OS

➤ 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:

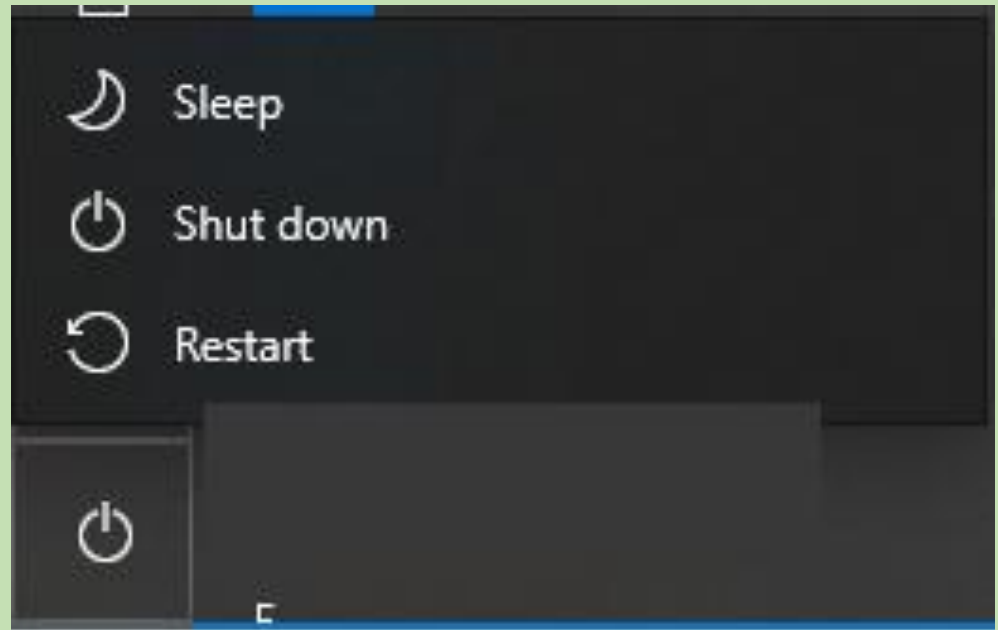
- PC stays on.
- PC uses Low Power.
- Apps stay open.

✓ Shut Down:

- Closes all Apps
- PC turns off.

✓ Restart:

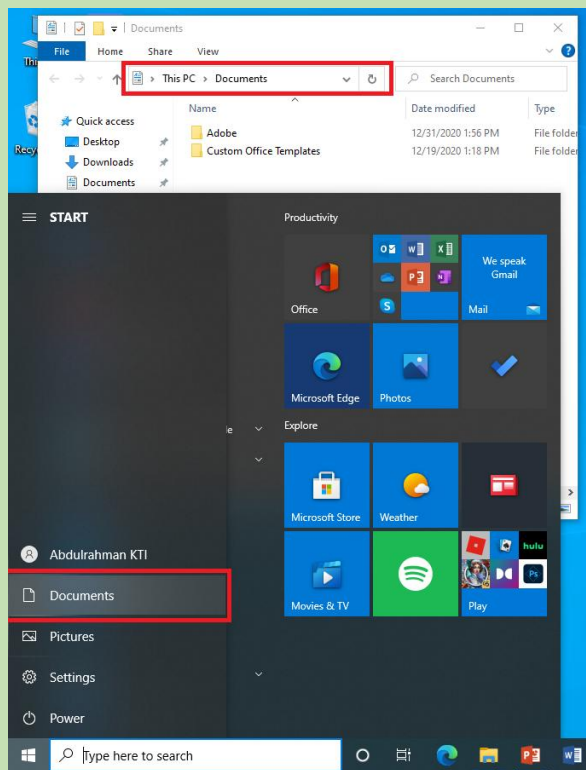
- Closes all Apps
- PC turns off **Then** turns on again.



Windows 10, Start Menu (2)

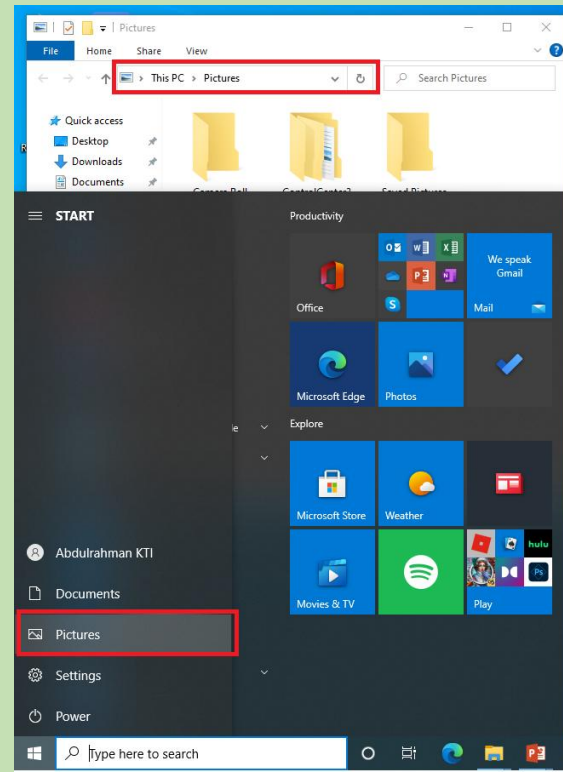
➤ Documents

- ✓ 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:

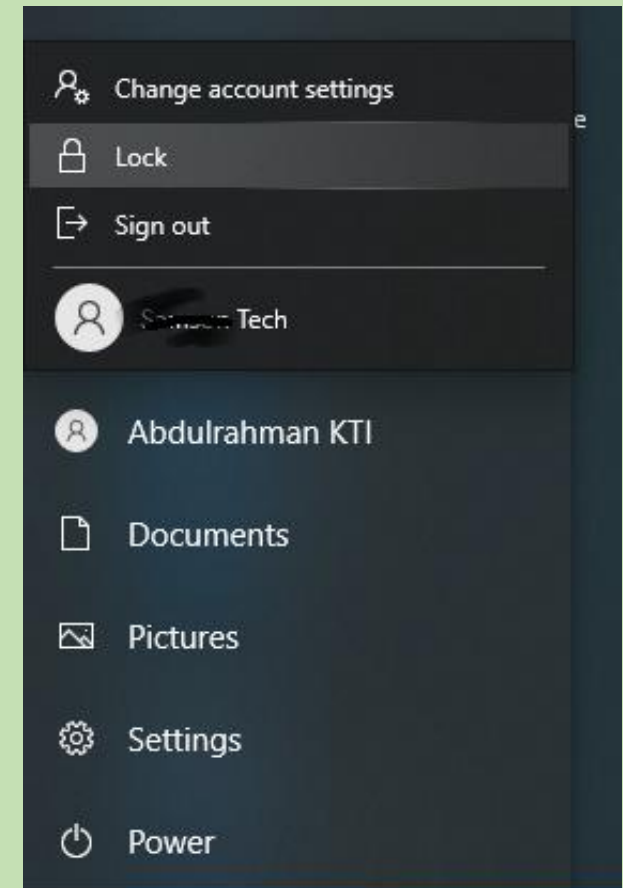
- Locks the current user account.
- Opened programs remain active.
- The User must “Sign in” again to continue working.

✓ 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. | ○ Sign-in Options | ○ Family & Other Users |
| ○ Email & Accounts | ○ Access work or School | ○ Sync user settings |

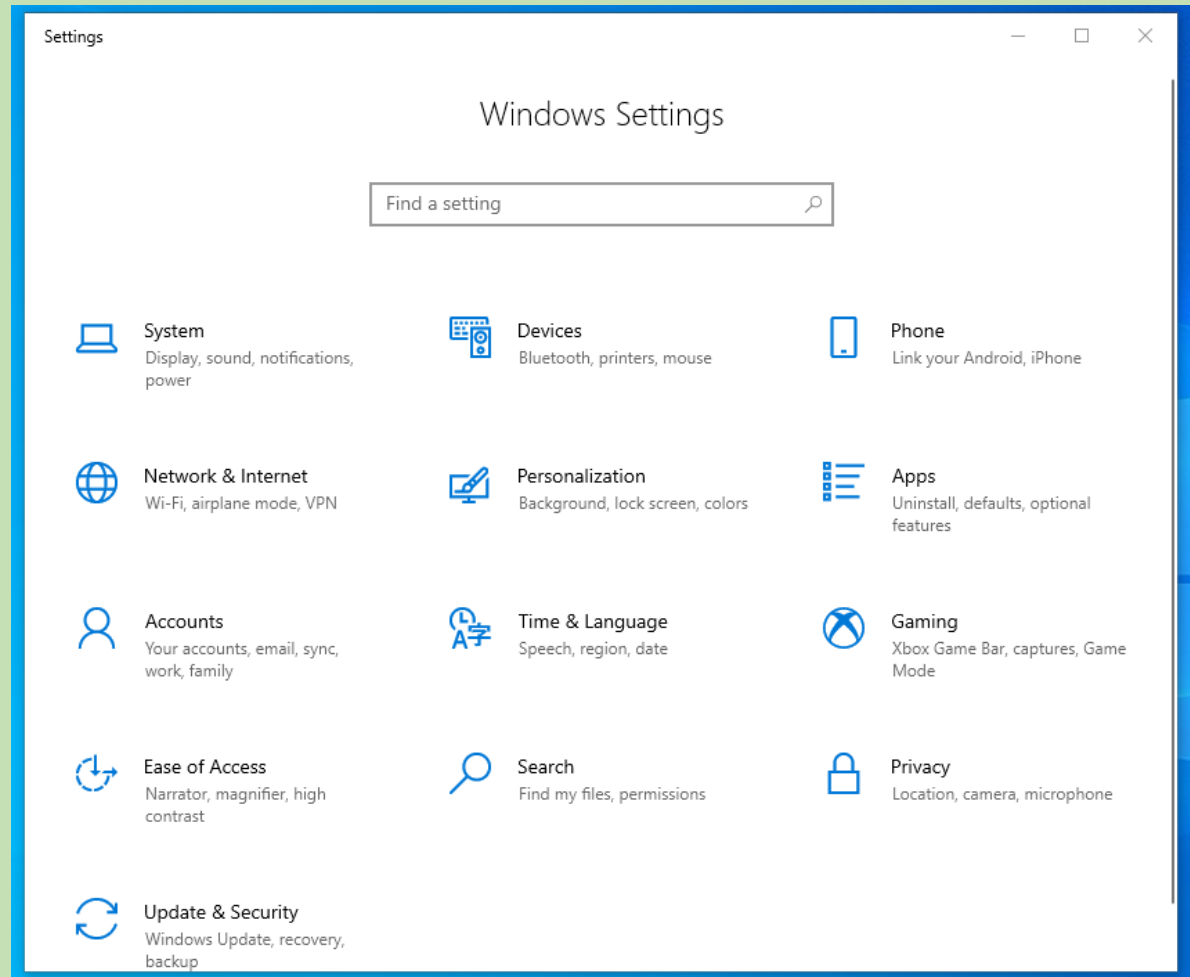


Windows 10, Start Menu (4)

➤ 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

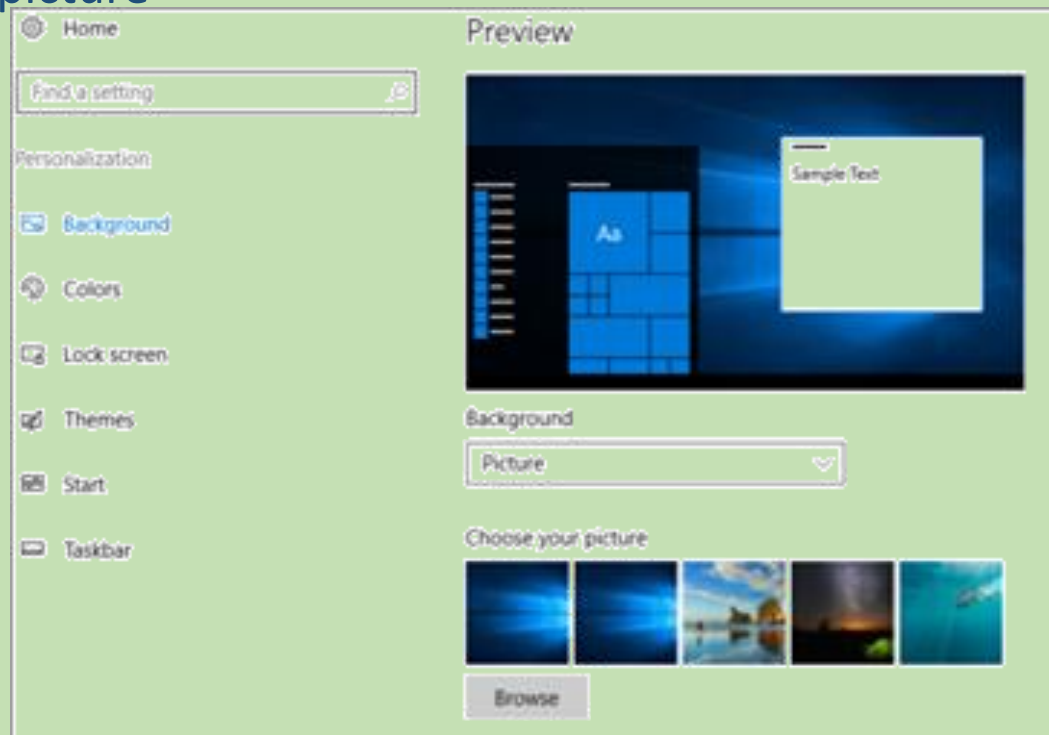
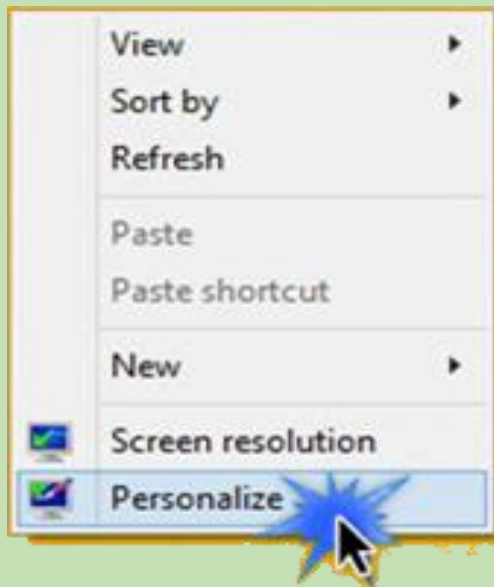


Win 10, Desktop Background

➤ Win 10 user can change desktop background:

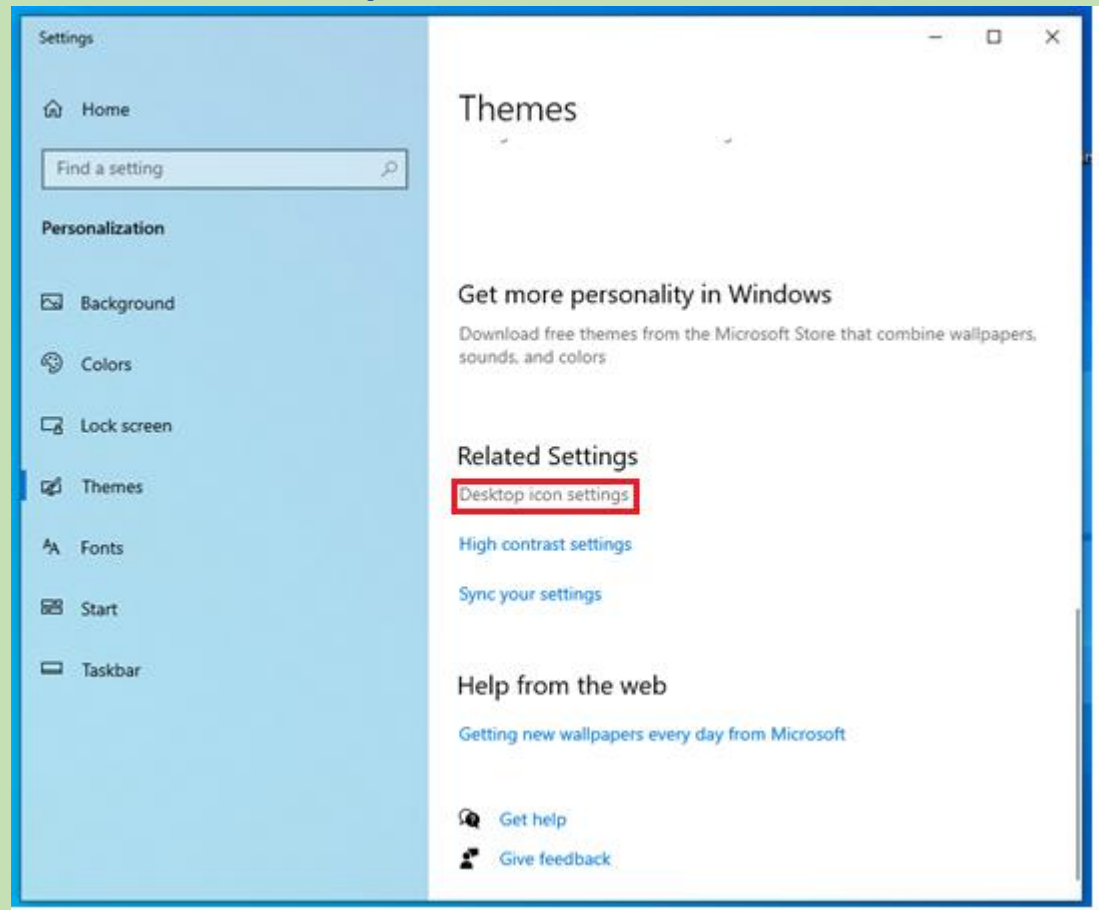
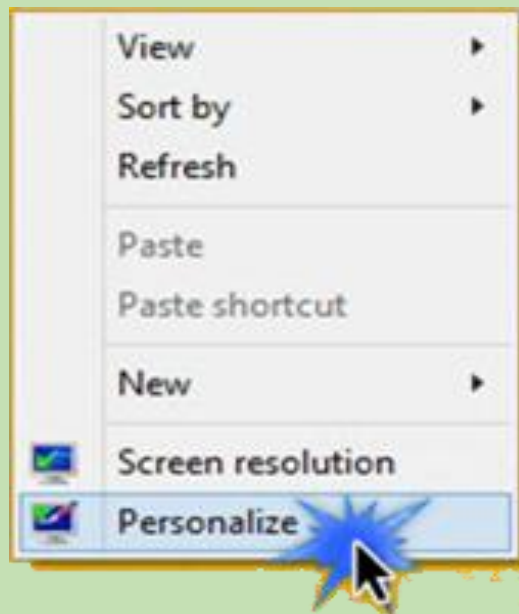
- ✓ Right-click in any blank area on the **Desktop**
- ✓ Select **Personalize** to open its options.
- ✓ Select a default Win **Background** pictures

Or **Browse** to select a stored picture



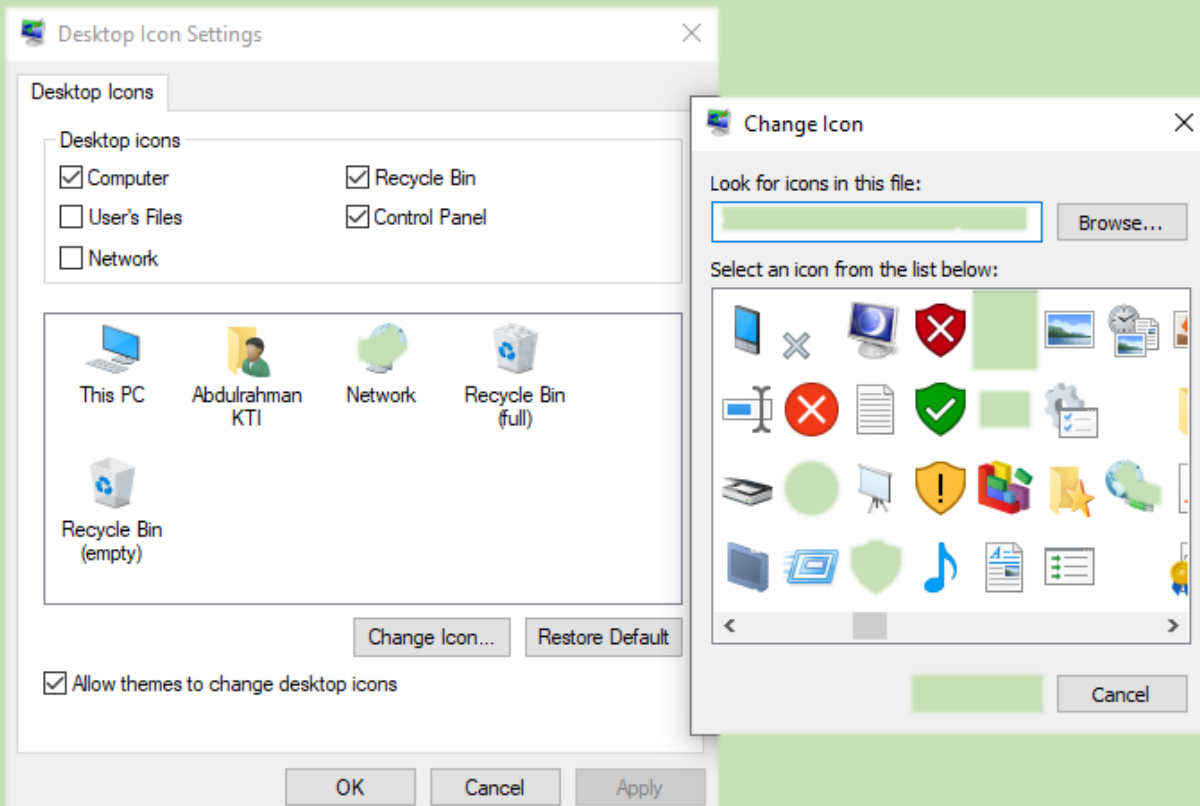
Win 10, Desktop Icons (1)

- 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)

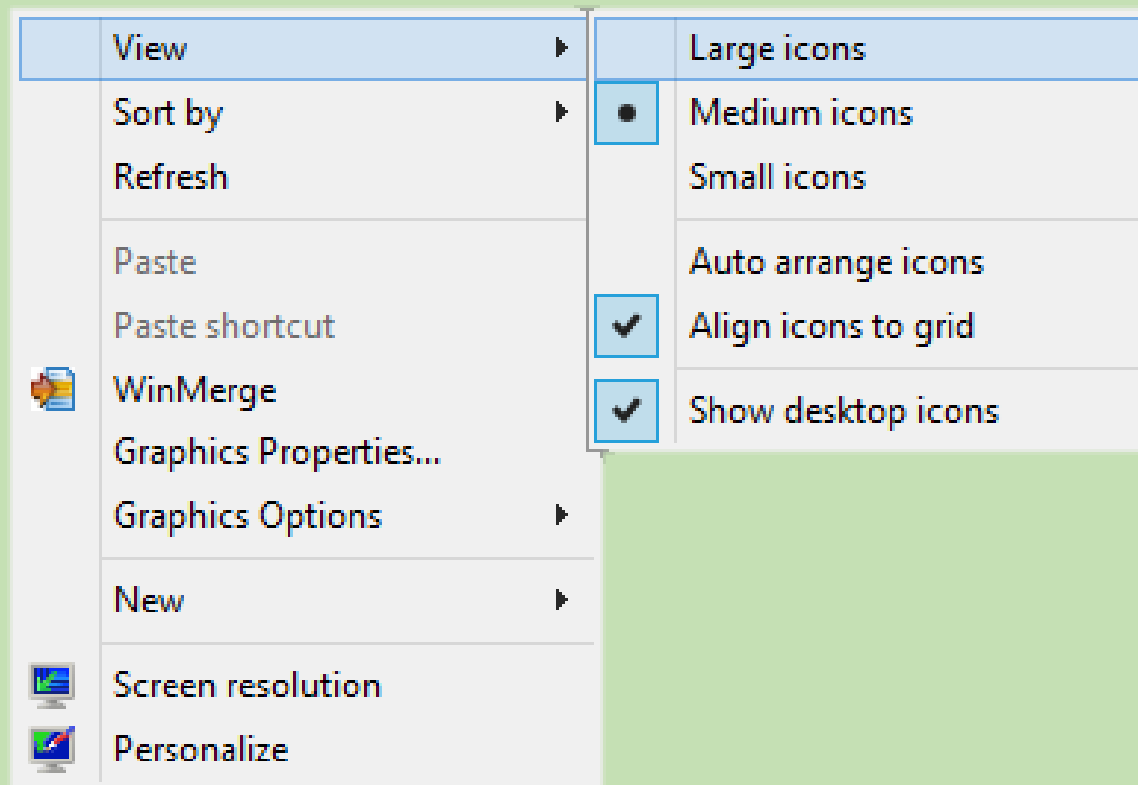
- Win 10 user can change desktop Icons:
- ✓ The user can select the **Desktop Icons**
- ✓ The user can **Change Icons**
- ✓ The user can cancel the changes by selecting **Restore Default**



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**)



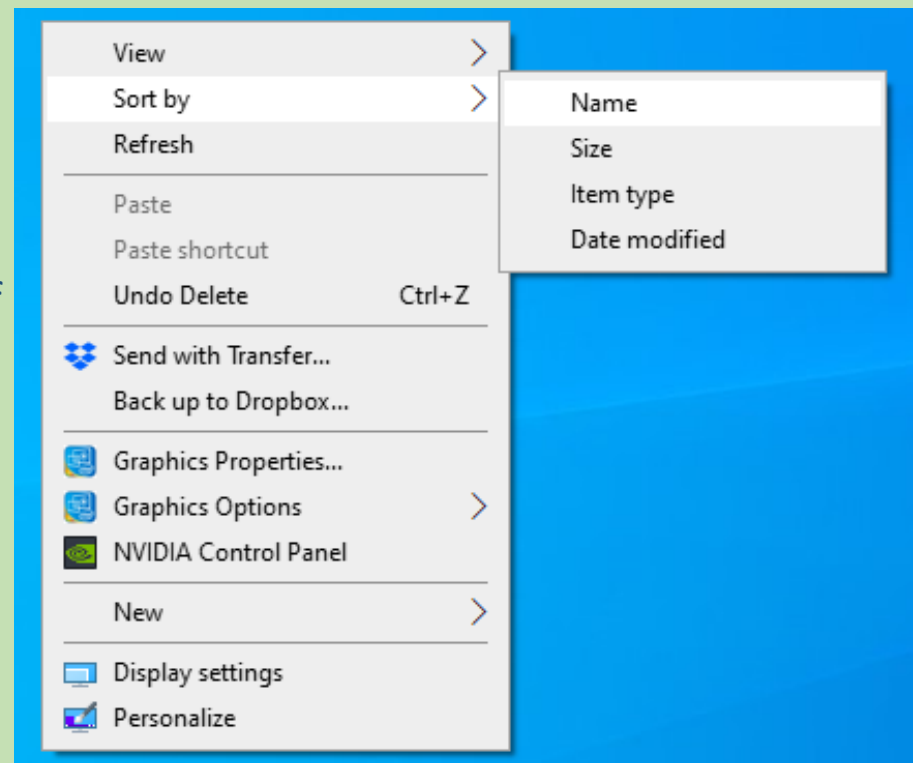
Win 10, Desktop Icons (4)

➤ 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)

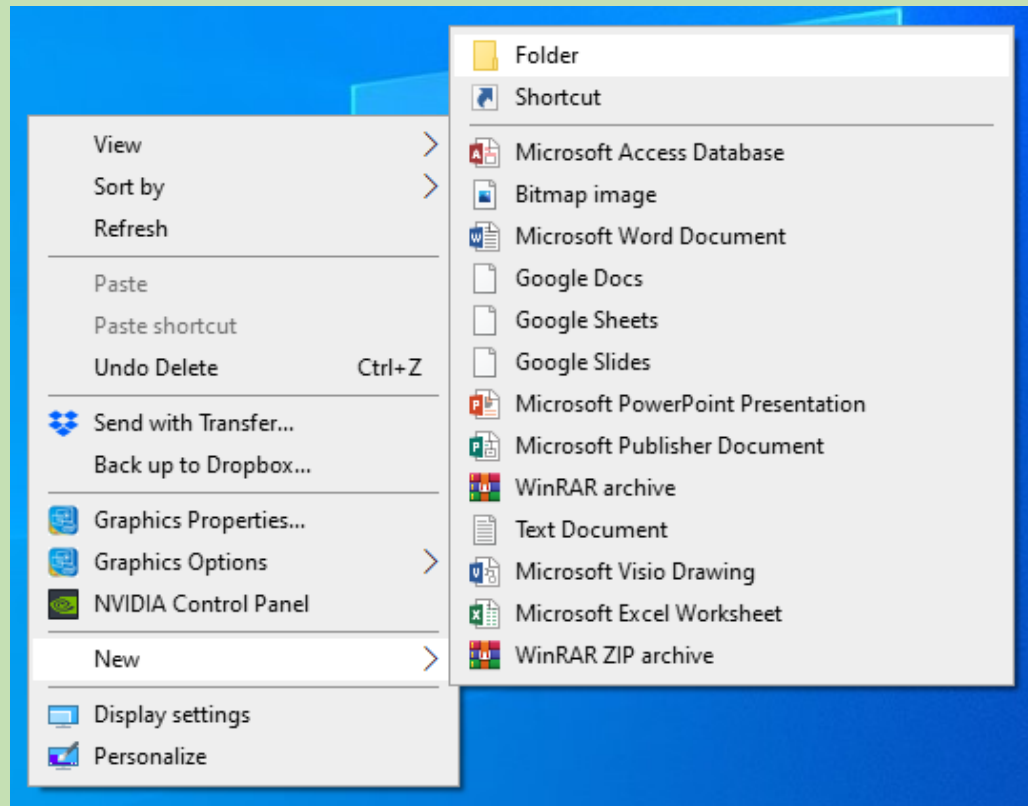
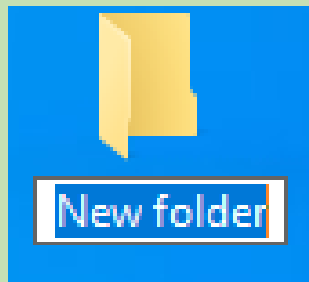
➤ To create a new Folder

✓ Right-click in any blank area on the **Desktop**

✓ Select **New**

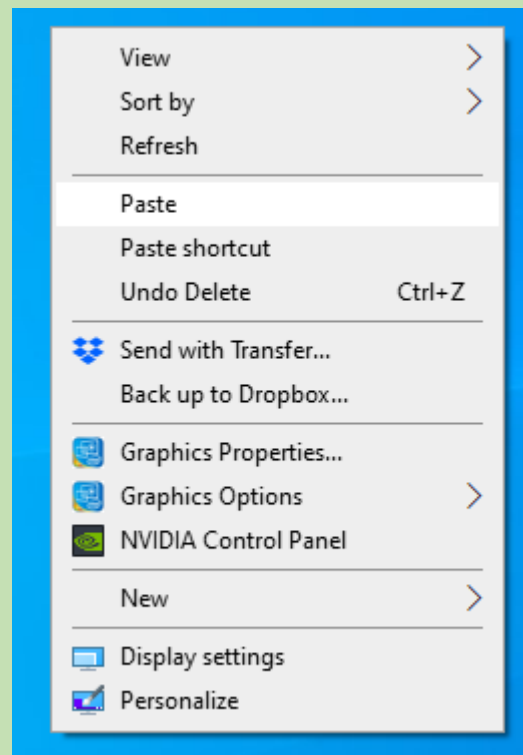
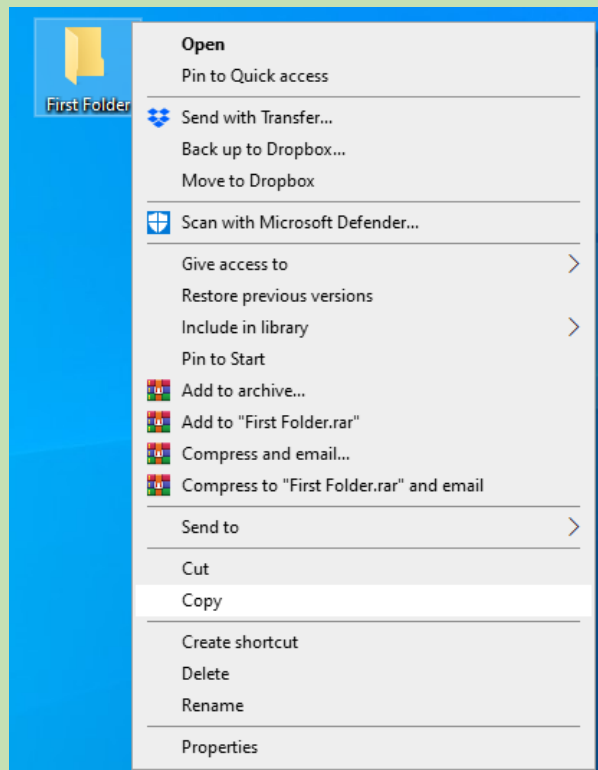
✓ Select **Folder**

✓ 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

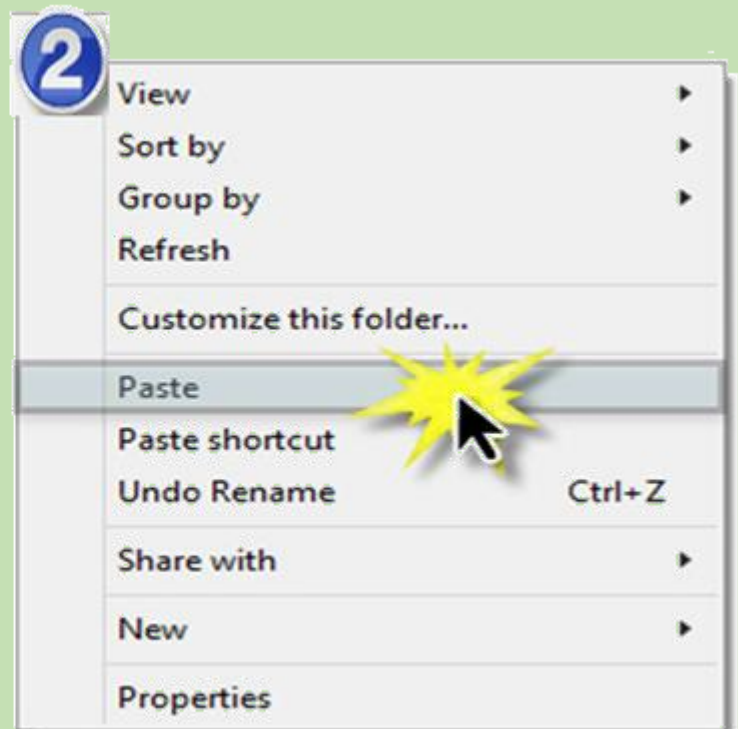
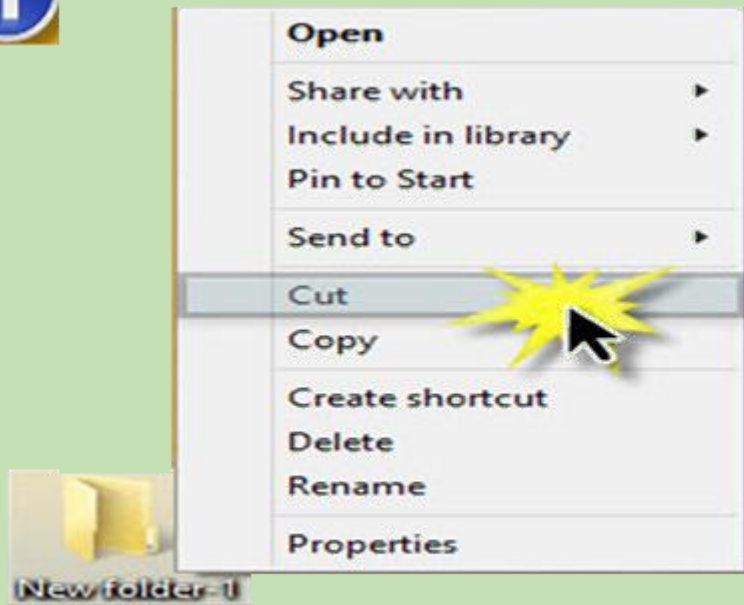


Folder Management (3)

➤ To Cut a Folder

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

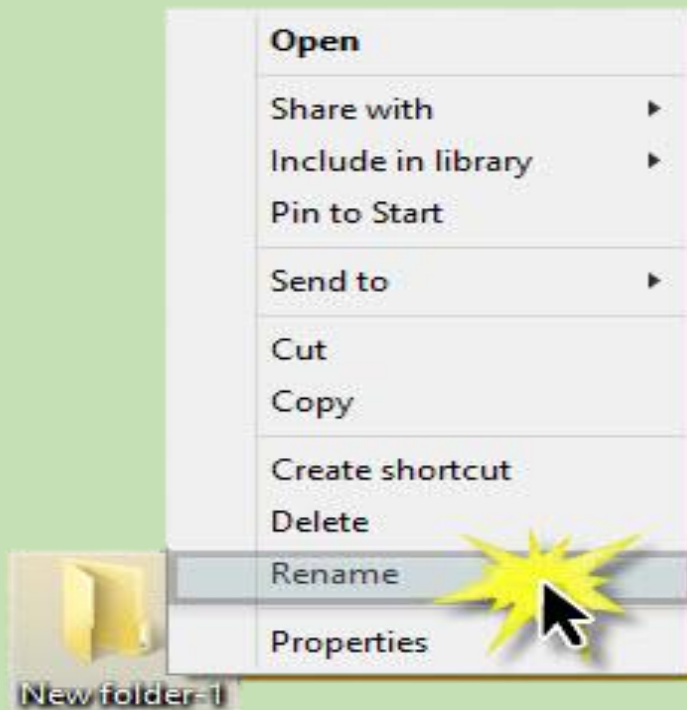
1



Folder Management (4)

To Rename Folder

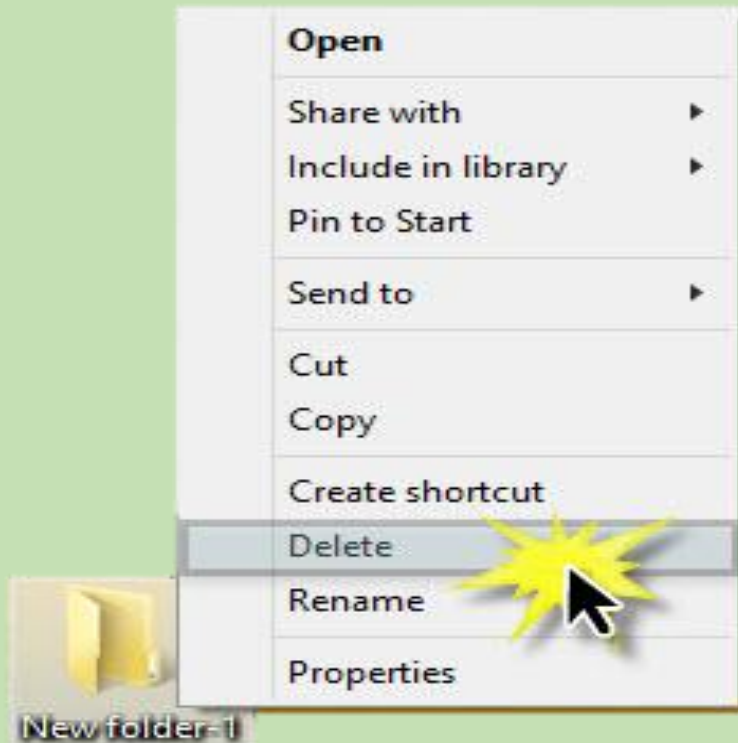
Right-click on the **Folder** and select **Rename**



Folder Management (5)

To Delete Folder

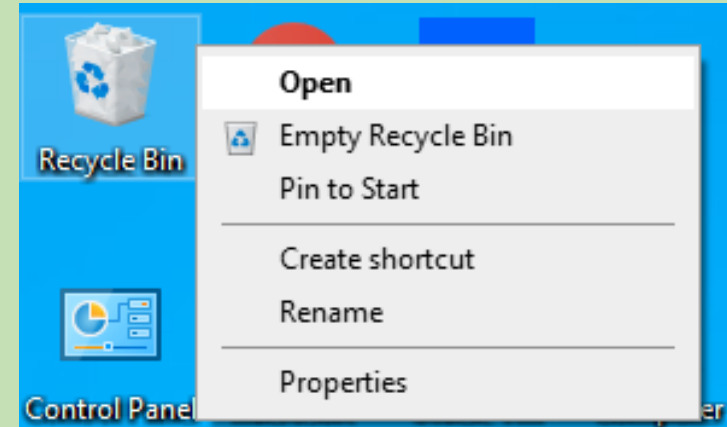
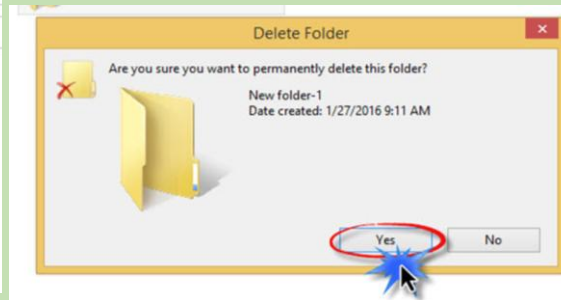
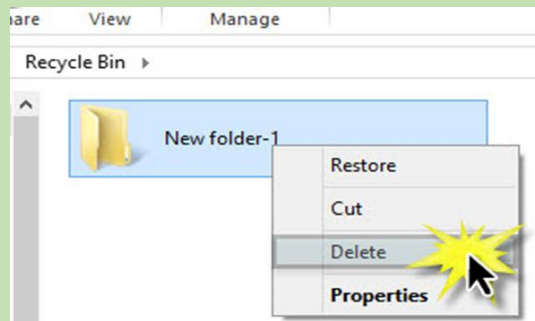
- ❑ Right-click on the **Folder** and select **Delete**
- ❑ After you deleted the folder, you can find it in the **Recycle Bin**



Folder Management (6)

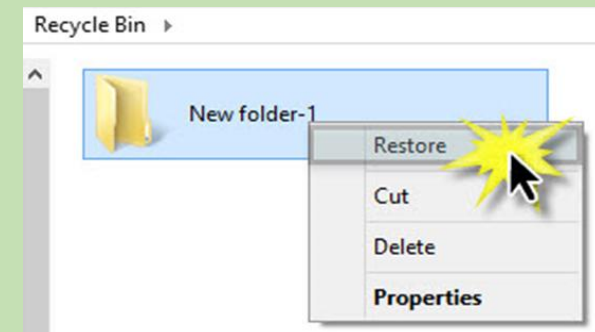
To Delete Folder in the Recycle Bin

- ❑ 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:

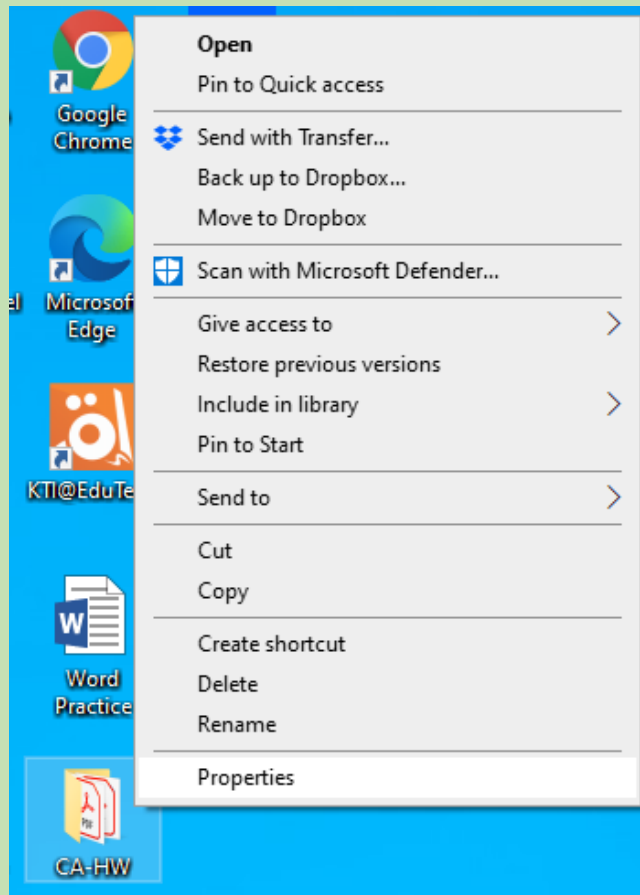
- ❑ Right-click on the deleted Folder in the **Recycle Bin** then select **Restore**, the deleted folder will be restored to its original location



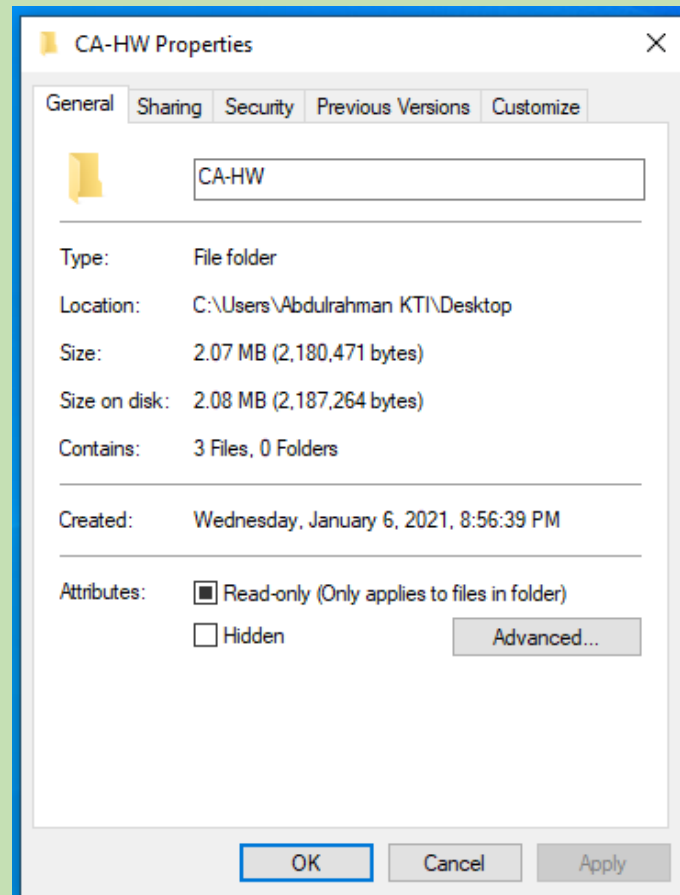
Folder Management (7)

To View Folder Properties:

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



Select Properties



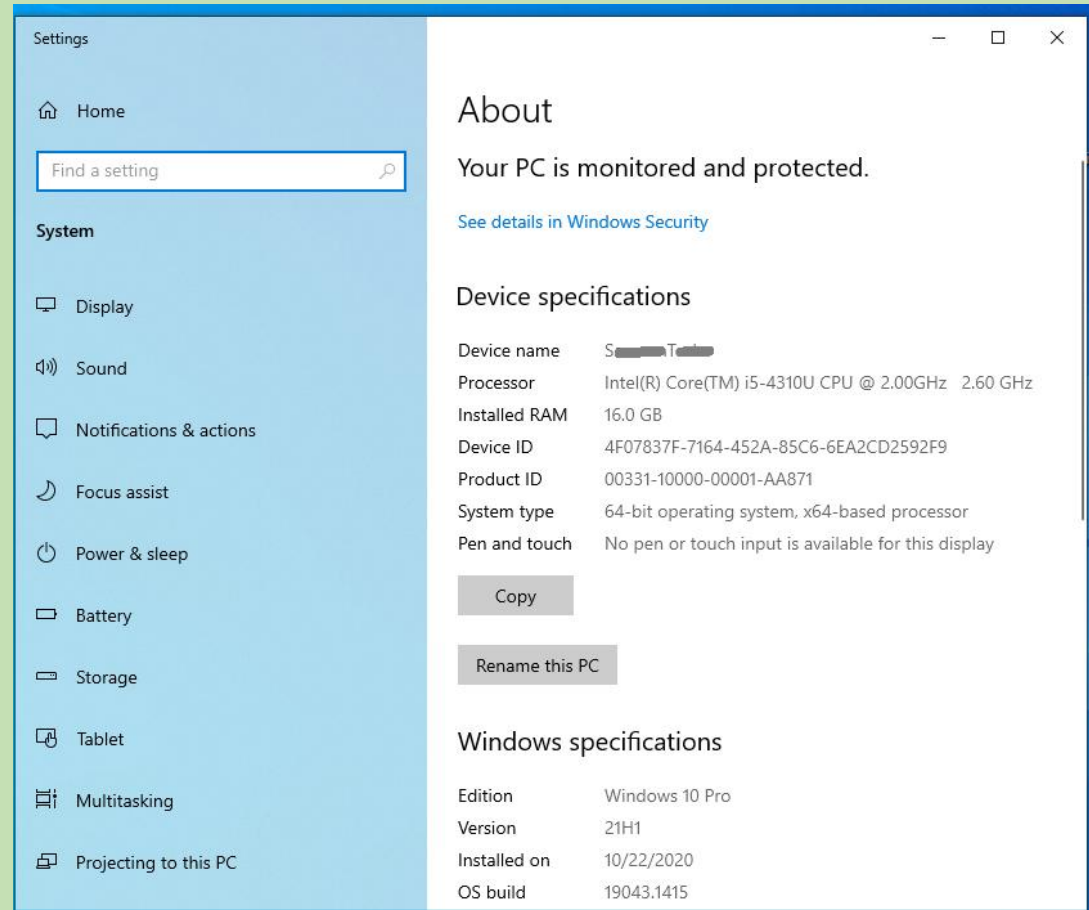
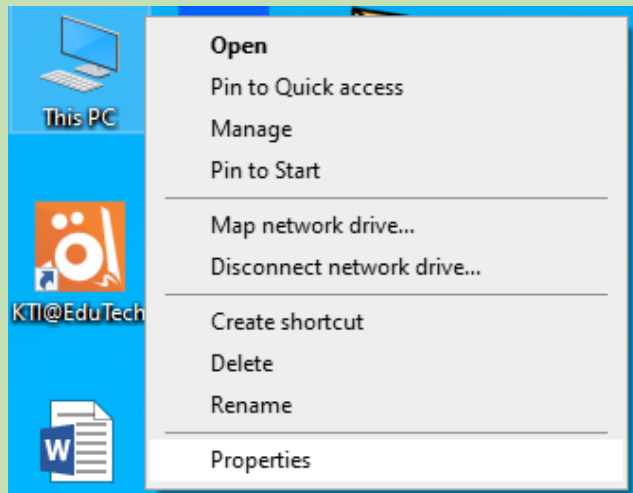
Computer Properties

To View Computer's Properties:

❑ Right click on the **This PC** icon

❑ Select **Properties** to:

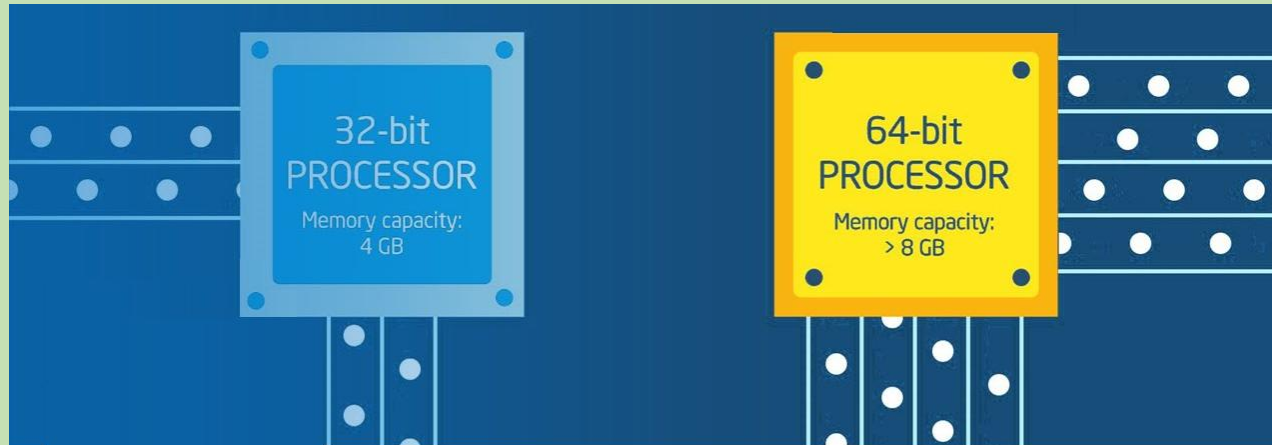
- ✓ View Device Specifications
- ✓ View Windows Specifications
- ✓ Rename PC
- ✓ And more **Related Settings**



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

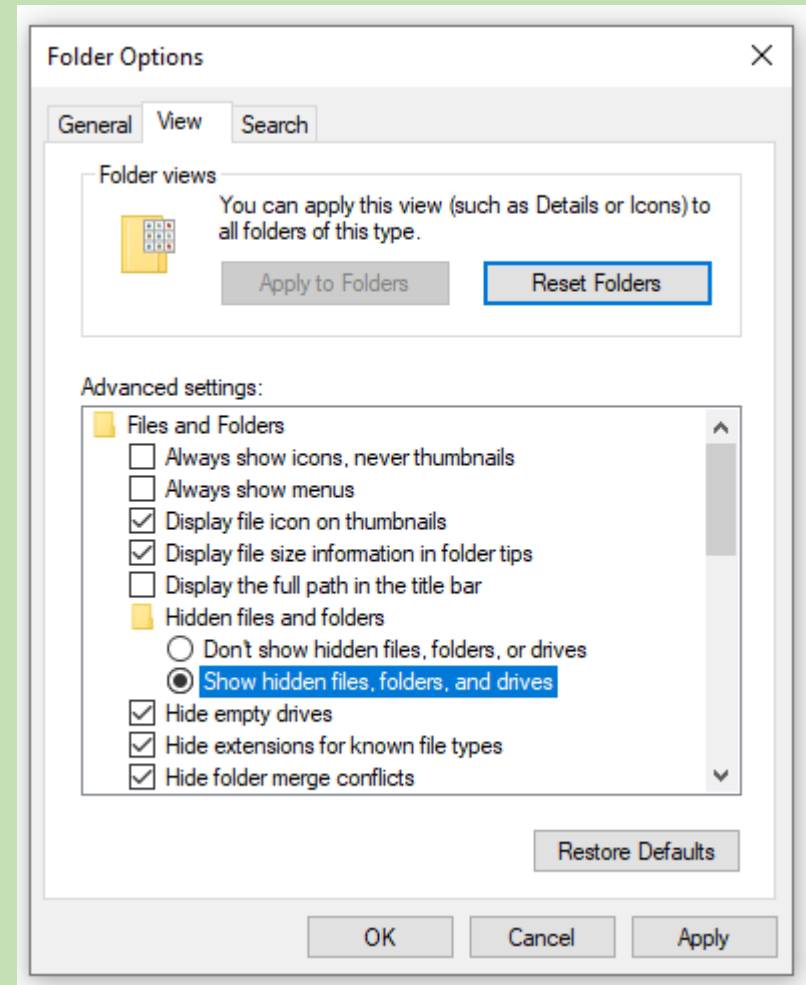
A file name ends with 3 characters that are called the *extension*. These three characters are separated from the file name by period (●)

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

