



# Lecture 1

## Computer Fundamentals

Assistant Lecturer. Shahad Laith



# Lecture 1

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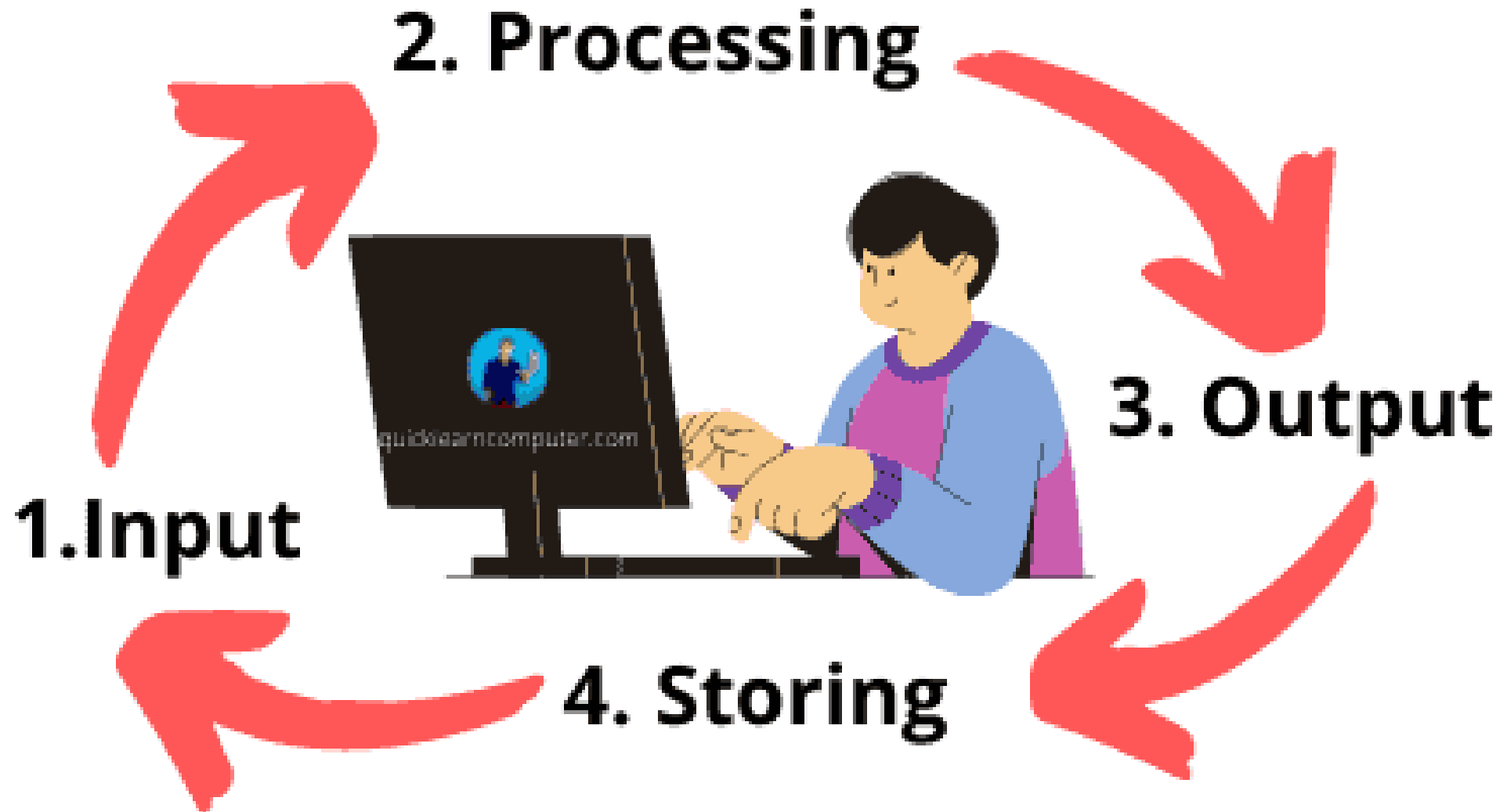
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# Computer Fundamentals

A computer is an **electronic device**, operating under the control of instructions stored in its own memory that can accept data (input), process the data according to specified rules, produce information (output), and store the information for future use.



# Basic Functions of Computer



# COMPUTER COMPONENT

## HARDWARE AND SOFTWARE



**HARDWARE**



**SOFTWARE**

# Hardware

The term **hardware** refers to the physical components of your computer such as the system unit, mouse, keyboard, monitor etc.

# Software

The **software** is the collection of instructions that makes the computer work. For instance, when you type in words via the keyboard, the software is responsible for displaying the correct letters, in the correct place on the screen.

# Types of Computer

## 1) Mainframe computer

It is a type of computer used in giant institutions in industry, statistics, and economic operations. These computers were placed in huge rooms and were covered in metal boxes.

Almost all mainframe computers have the ability to run more than one operating system on the same device. Therefore, it is possible to operate more than one device, which is known as virtual devices. One mainframe can replace hundreds of server computers.



## 2) Personal Computer(PC)

Personal computer (PC), a digital computer designed for use by only one person at a time. A typical personal computer assemblage consists of a central processing unit (CPU), which contains the computer's arithmetic, logic, and control circuitry on an integrated circuit; two types of computer memory, main memory, such as digital random-access memory (RAM), and auxiliary memory, such as magnetic hard disks and special optical compact discs, or read-only memory (ROM) discs (CD-ROMs and DVD-ROMs); and various peripheral devices, including a display screen, keyboard and mouse, and printer.





### 3) computer network

A computer network is a system that connects two or more computing devices for transmitting and sharing information. Computing devices include everything from a mobile phone to a server. These devices are connected using physical wires such as fiber optics, but they can also be wireless.

The first working network, called ARPANET, was created in the late 1960s and was funded by the U.S. Department of Defense.



## 4) Laptop

A handheld personal computer (PC) is a **pocket-sized** computer typically built around a clamshell form factor and is significantly smaller than any standard laptop computer, but based on the same principles.

Most handheld PCs use an operating system specifically designed for mobile use. Ultra-compact laptops capable of running common x86-compatible desktop operating systems are typically classified as subnotebooks.

The name Handheld PC was used by Microsoft from **1996 until the early 2000s** to describe a category of small computers having keyboards and running the Windows CE operating system.



# What does the computer do?

1. Input— entering data into the computer.
2. Processing— performing operations on the data.
3. Output— presenting the results.
4. Storage— saving data, programs, or output for future use.

# Devices that comprise a computer system



# 1- Input Devices:

An input device is any hardware component that allows you the user to input data (text, images, and sounds) and instructions into the computer to be processed. The most commonly used input devices are:

❖ **Keyboard:** Main input devices you use to control your PC and type letters, numbers, and symbols and commands into the computer.

❖ **Mouse:** Pointing devices you use to control your PC. Click the mouse allows you to enter data by pressing the button. There are many operations that are much easier to perform with a mouse than a keyboard because you can just point and click to select an item on a screen or choose an item from a list of options.

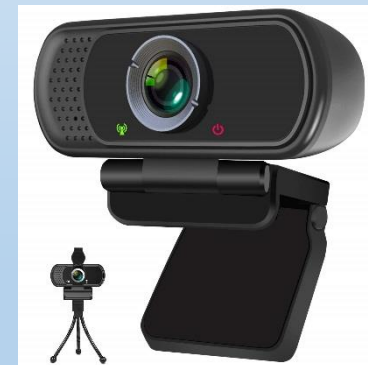


❖ **Microphone:** The microphone is usually used for input sounds and instructions into the computer

❖ **Scanner:** This input device generates a digital representation of an image for data input (such as text and pictures) to a computer

❖ **Digital camera:** The digital camera allows you to take pictures or create movie that you can input into your computer.

❖ **PC video camera (Web Cam):** The PC video camera allows you take both video and still images that you can input into your computer



# 2- Output Devices

An output device is any hardware component that gives information to the user and send processed data out of your computer. When you send inputs into the PC, it processes them and produces useful output for you.

**The most commonly used output devices are as follow:**

- ❖ **A Monitor(display screen):**This output device displays your information (text, graphics, and videos) on a screen.
- ❖ **A Printer:** Used to prints information on paper.
- ❖ **A Speaker:** Sound output you will get from a speaker. Speakers allow you to hear (music, voice and other sounds) and let a lots of people listen.
- ❖ **Headphones:** Keep the sound to one person.

**Printer**



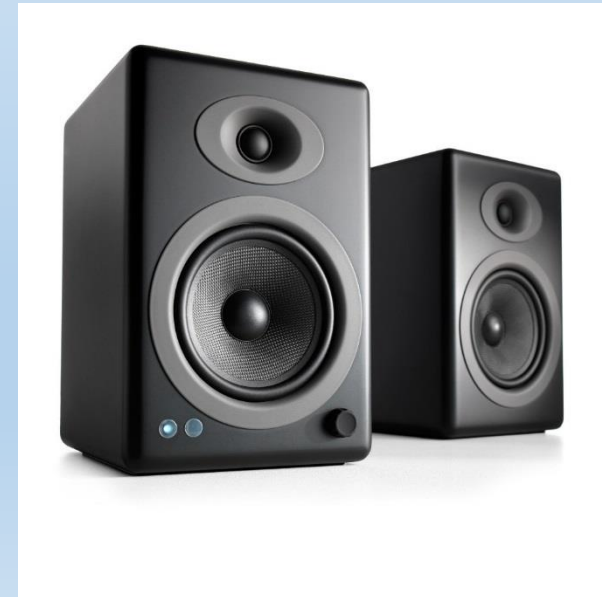
**Monitor(display screen)**



**Headphones**



**Speaker**







# Lecture 2

## Windows 10 Desktop

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# Windows 10 Desktop

It is a version of the Windows computer operating system, produced by Microsoft, that was discovered in 2014, and released in 2015. What was not expected is that the name of this new version will be “Windows 10” and not “Windows 9.” The company announces that the name “Windows 9 will not fit the big leap the company has made in the operating system

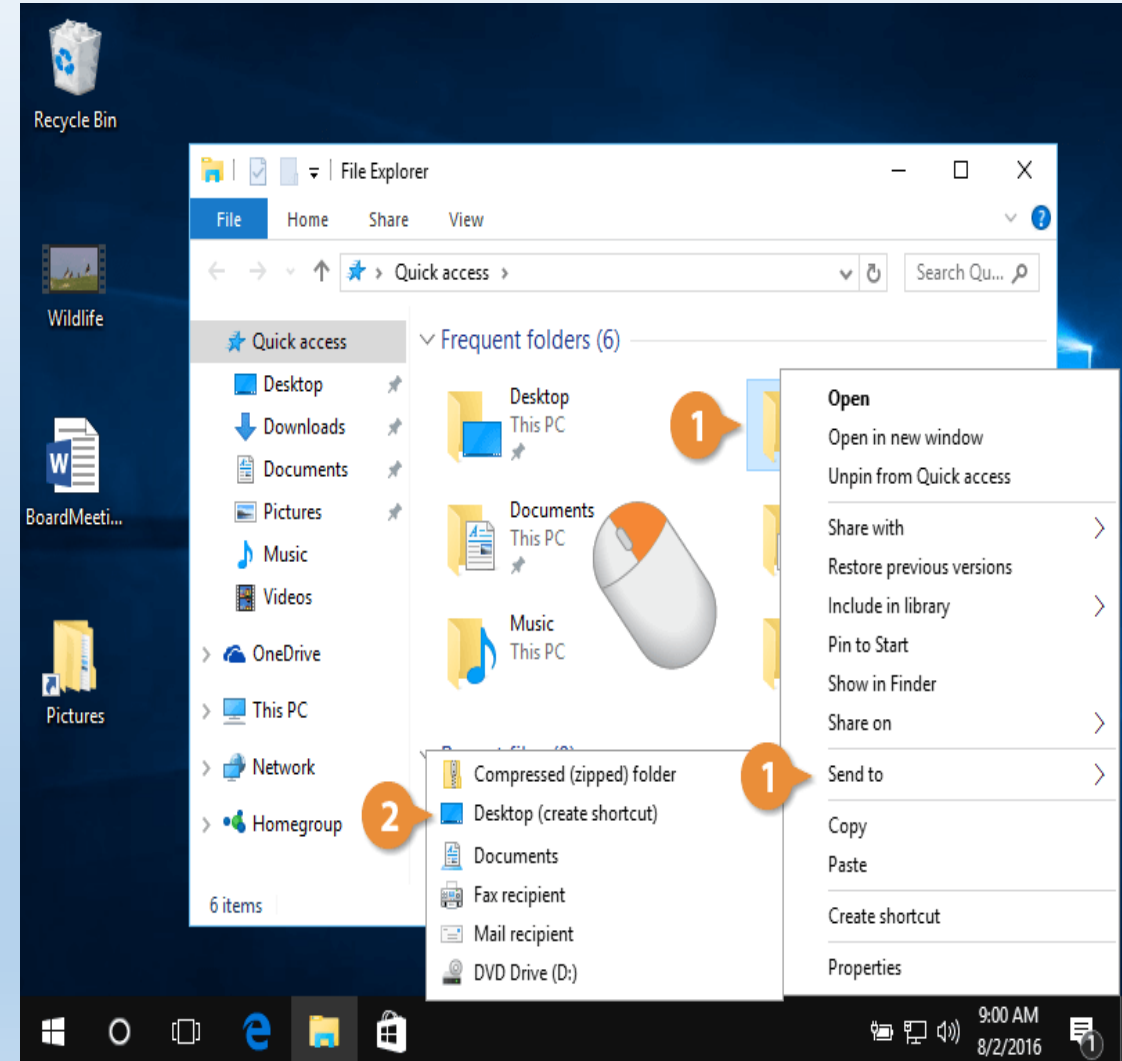
# After logging the computer, Windows 10 desktop will be appeared.

## The Desktop layout is as follows:

### 1. Desktop Shortcuts

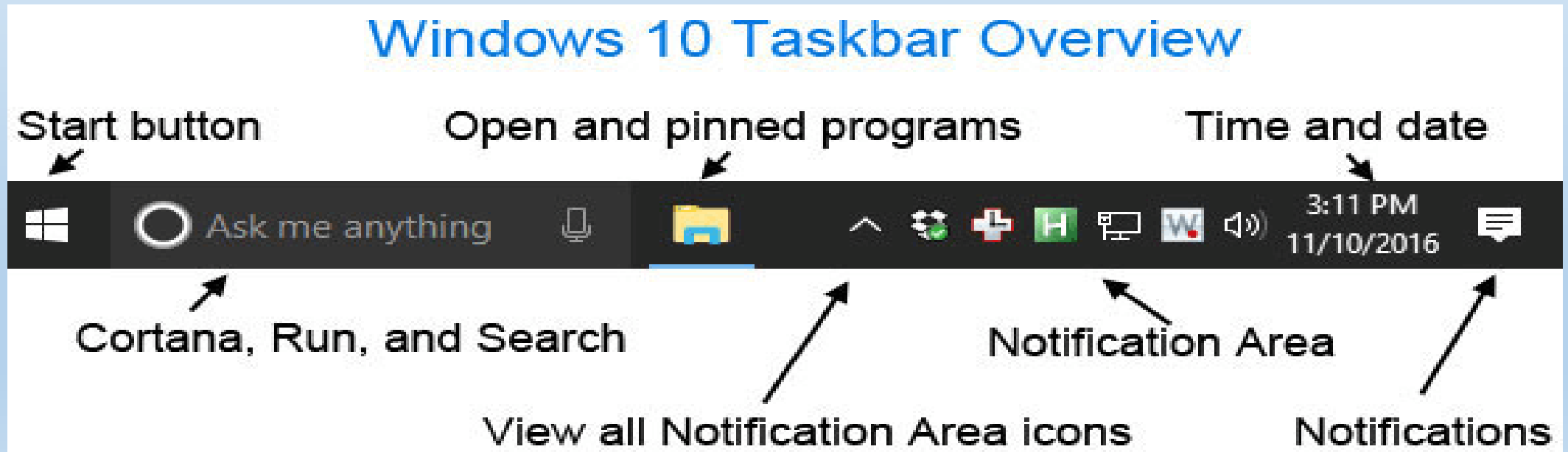
#### Create a Shortcut

- ❖ Follow these steps to add a shortcut to your desktop.
- ❖ Right-click a file, folder, or app, and then choose Send to.
- ❖ Choose Desktop (create shortcut).
- ❖ A shortcut to the item appears on your desktop.



## 2.The Taskbar

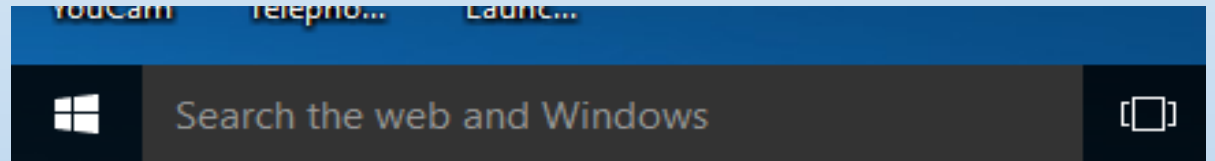
The Taskbar is a graphical user interface element that has been part of Microsoft Windows since Windows 95, displaying and facilitating switching between running programs.



### 3.The Start Menu

The Start Menu is the main point of access to your applications. There are two main ways to open it

**Step 1** – Use your mouse to click Windows icon in the lower-left corner of the taskbar.



**Step 2** – Press the Windows key on your keyboard.

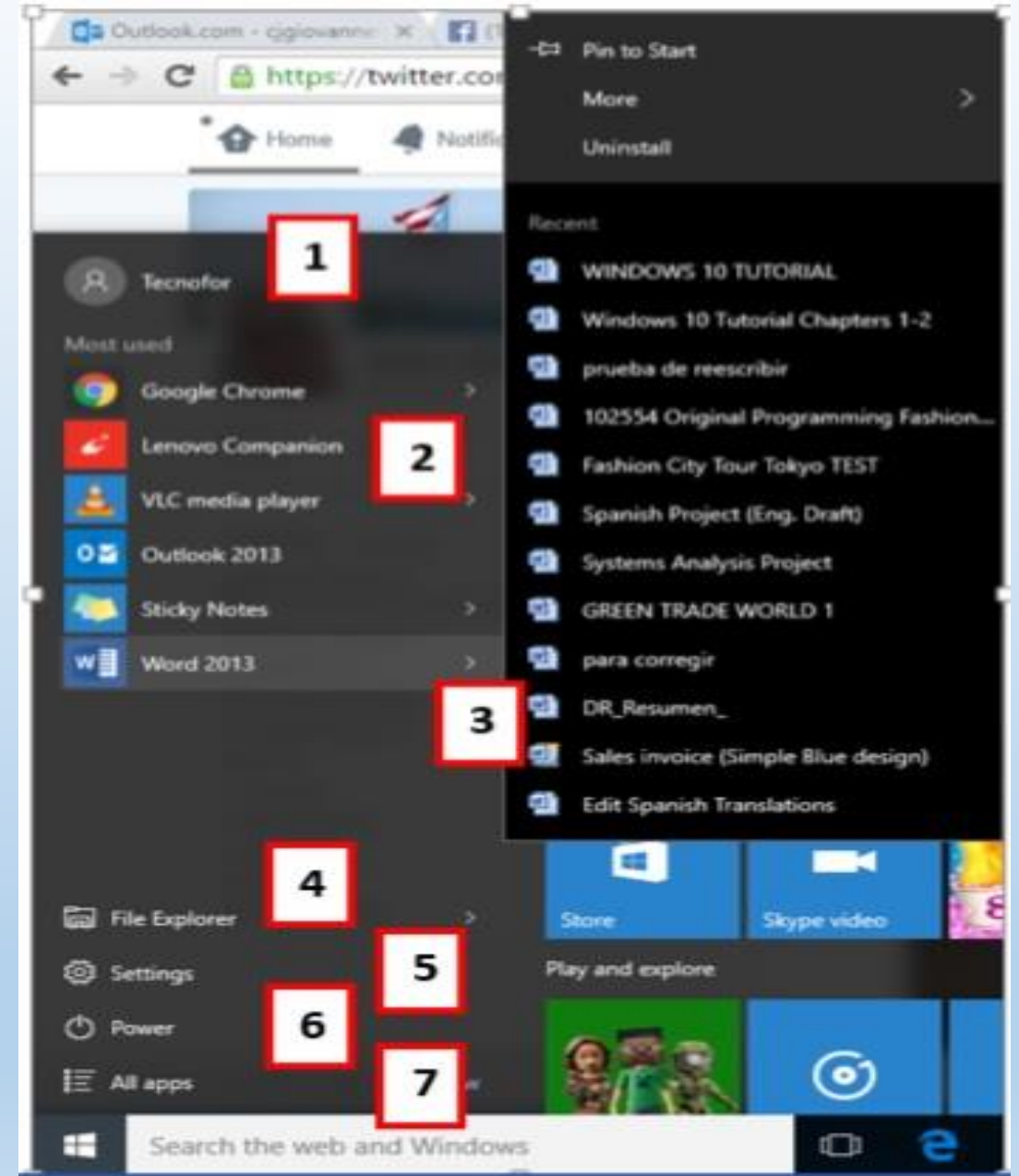


# The Windows 10 Start Menu features two panes.



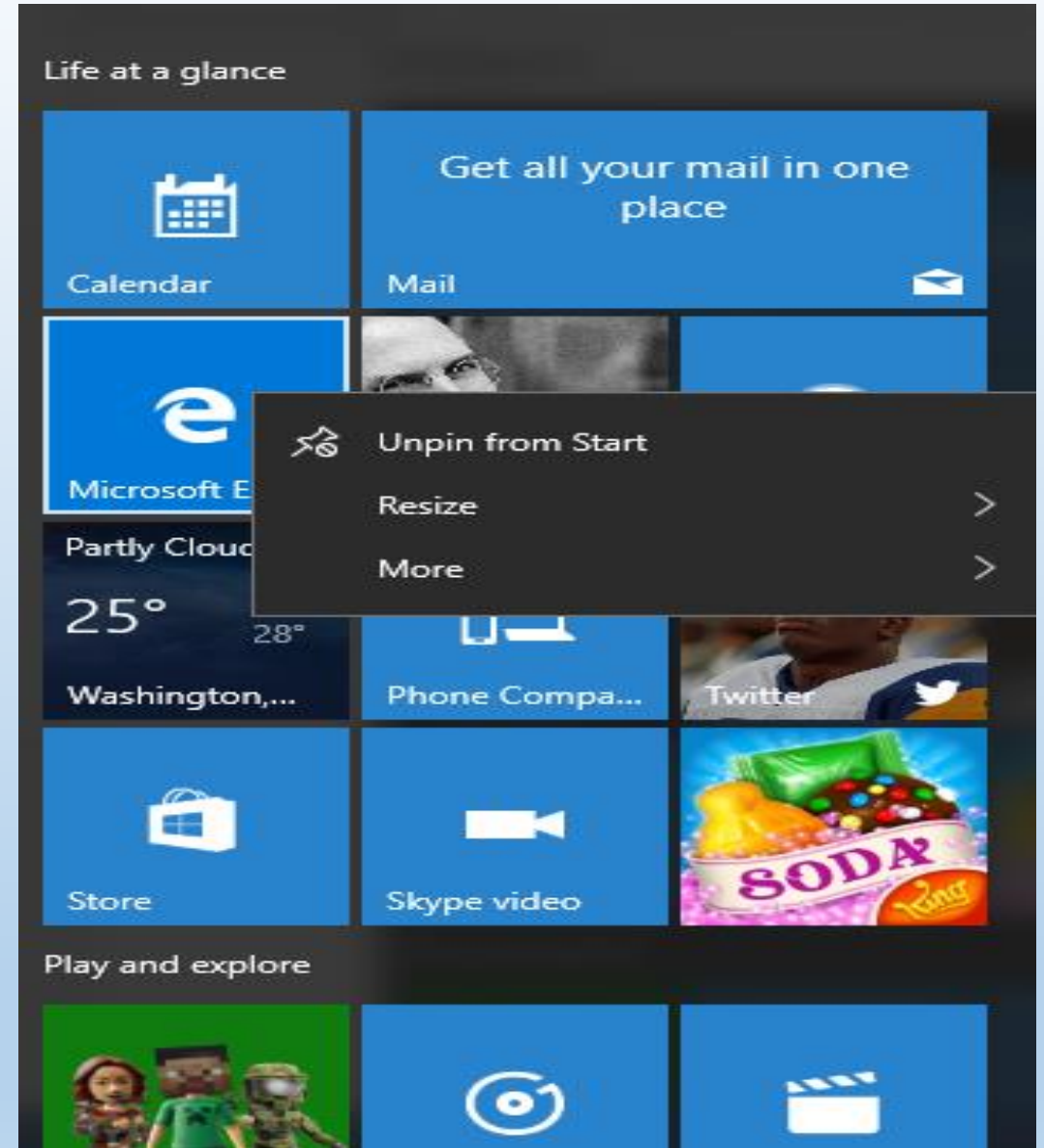
## A. Left Pane

1. Click the username at the top of the menu to change account settings or log in with another user.
2. Access the applications you use more frequently.
3. A small arrow next to an application will open a sub-menu with a list of recent documents opened with that application.
4. Open the "File Explorer" to navigate your folders and files.
5. Change the settings of your computer like your Internet connection or changing your background.
6. See different options to shut down your computer.
7. See a list of all the applications installed in your computer.



## B. Right Pane

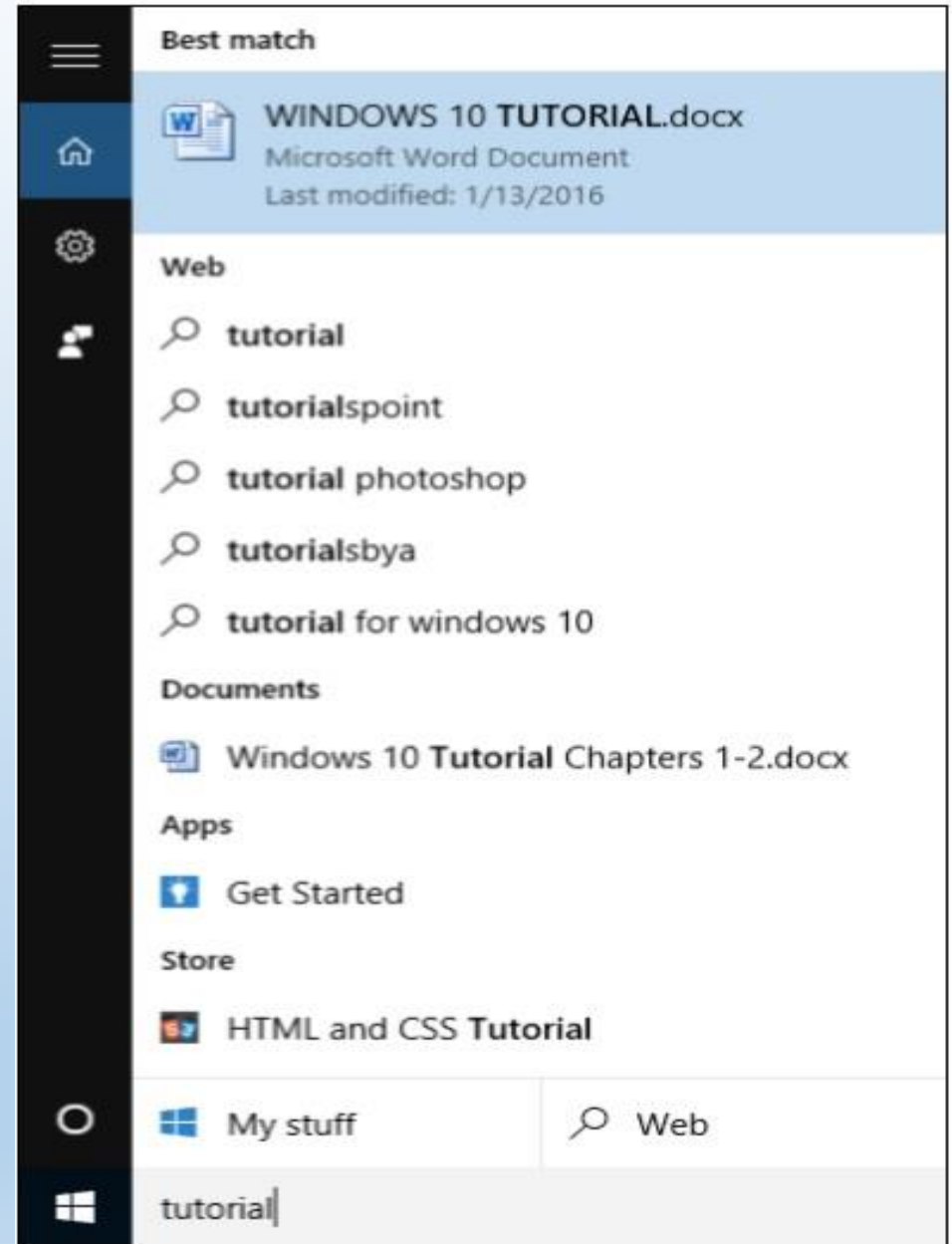
1. The right pane features a varied array of tiles, similar to the ones that were seen on the Start Screen of Windows 8.
2. These tiles can be moved and dragged to different places by holding the mouse button.
3. You can also configure them by right-clicking on them to see options to resize them or “unpin” them (remove them) from the Menu.
4. The whole Start Menu can also be resized by dragging the borders with the mouse to the desired size.





# 4. Windows Search

- ❖ The “Search box” on the Taskbar will allow you to search within your documents and files or on the Web for anything you write. The initial results will appear within the Start Menu itself.
- ❖ The results will be grouped according to the closest match (or matches) labeled “**Best match**” at the top of the list.



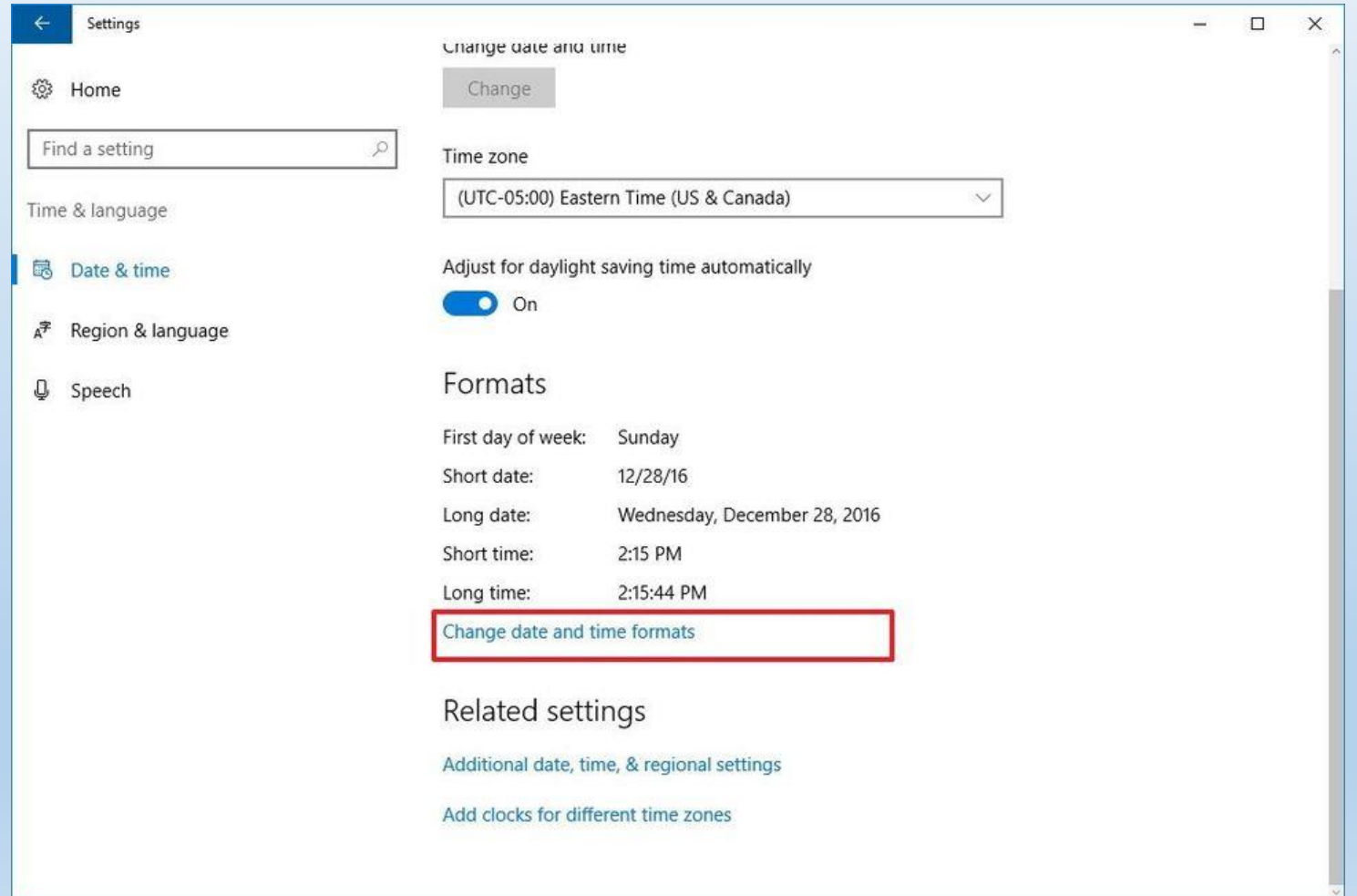
## **The remaining results will be grouped according to what they are or their location**

- Web results
- Documents or folders
- Apps
- System settings

# 5. Date/Time

## How to change date and time formats on Windows 10

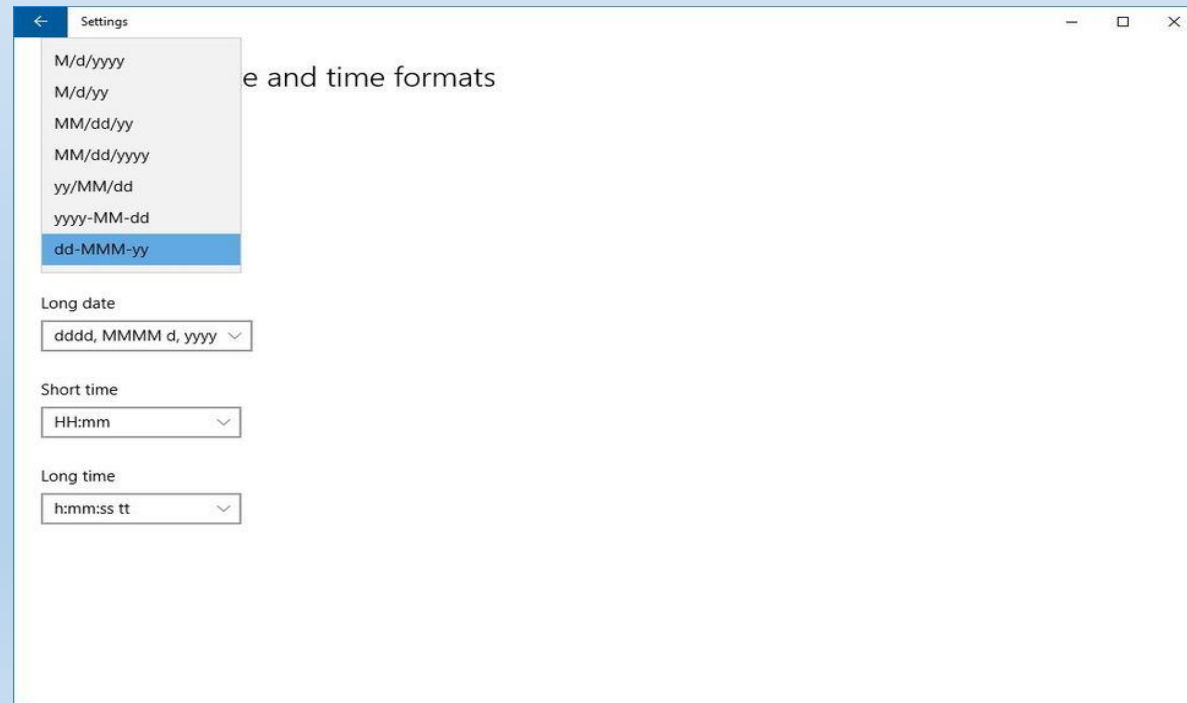
- A. Open Settings.
- B. Click on Time & language.
- C. Click on Date & time.



D. Under format click the Change date and time formats link.

E. Use the Short name drop-down menu to select the date format you want to see in the Taskbar.

F. Use the Short time drop-down menu to select the time format you want to see in the Taskbar.





# Lecture 3

## Working with file and folder

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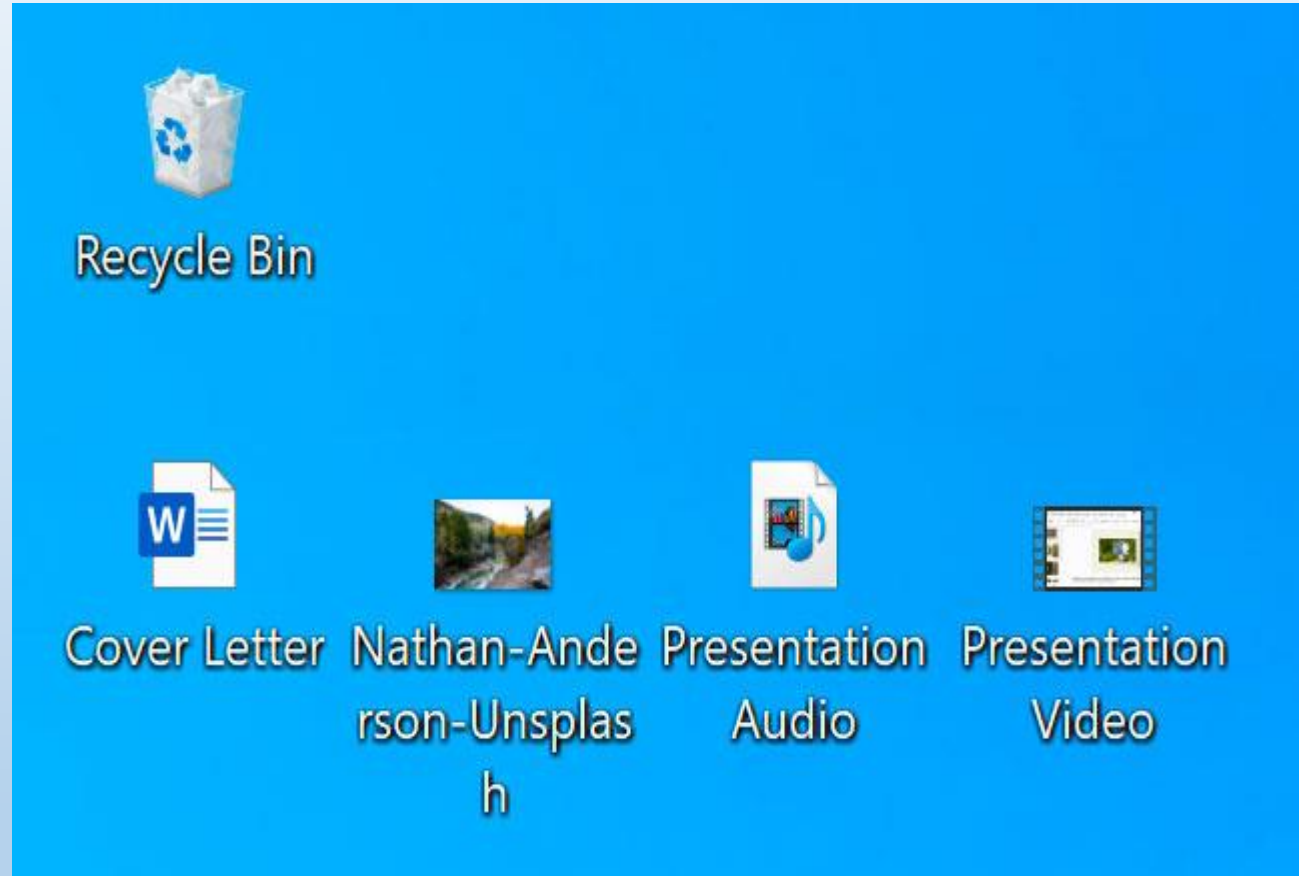
# Working with files and folders

Understanding how to work with files and folders is an important part of using your computer. Once you understand how files and folder work, you'll use them all the time. In this lesson, we'll show you the absolute basics of working with files, including how to **open files, move your files into folders,** and **delete files.**

## What is a file?

There are many different types of files you can use. For example, Microsoft Word documents, digital photos, digital music, and digital videos are all types of files. You might even think of a file as a digital version of a real-world thing you can interact with on your computer. When you use different applications, you'll often be viewing, creating, or editing files.

Files are usually represented by an icon. In the image below, you can see a few different types of files below the Recycle Bin on the desktop.



## What is a folder?

Windows uses folders to help you organize files. You can put files inside a folder, just like you would put documents inside a real folder. In the image below, you can see some folders on the desktop.



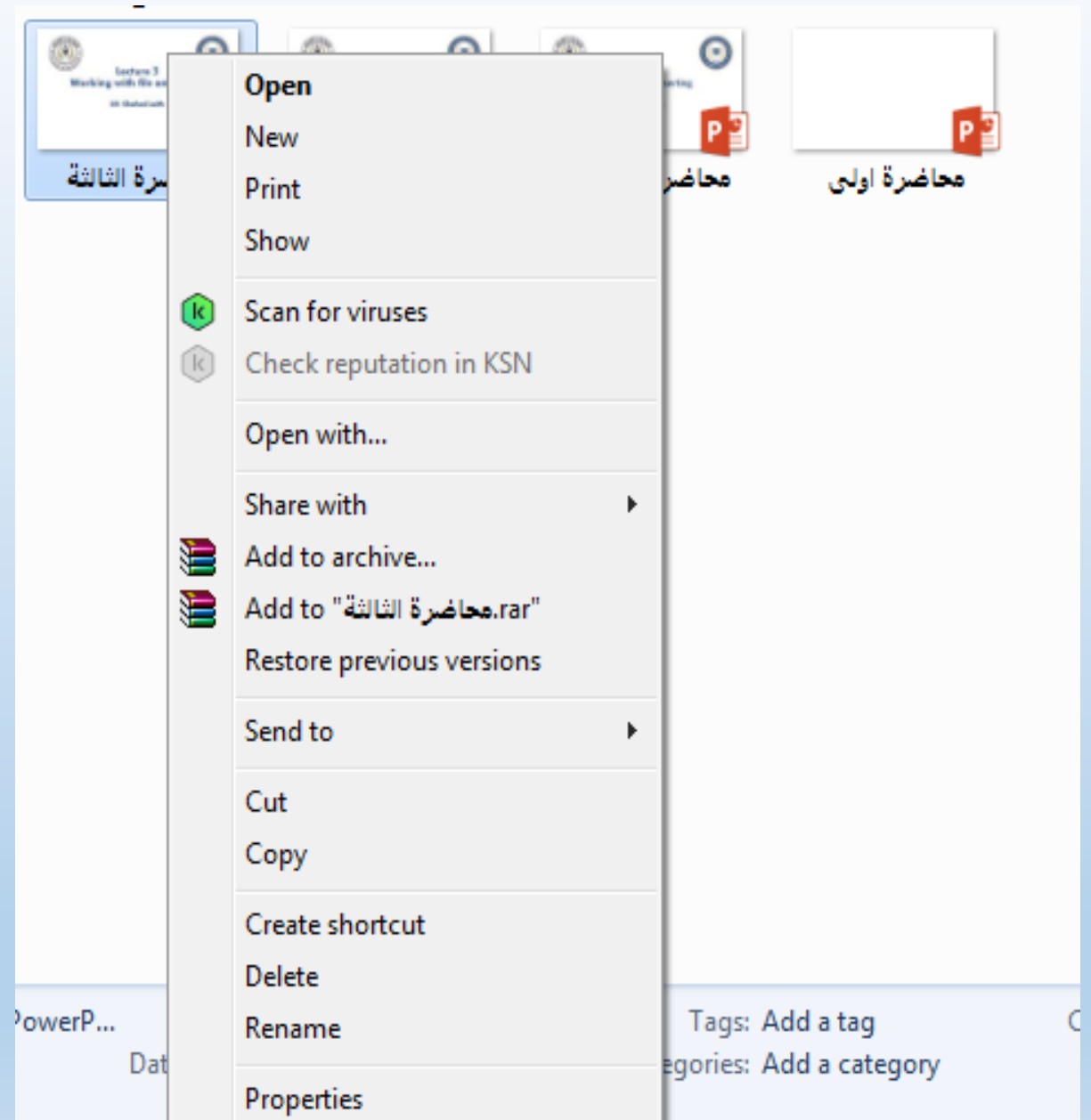


## To open a file:

The process of opening the file takes place in **two basic ways**: double-clicking the left mouse button on the file

**The second method** is by pressing the right mouse button once. A menu will appear from which we can choose Open, then the file will open.

The same applies to opening any folder

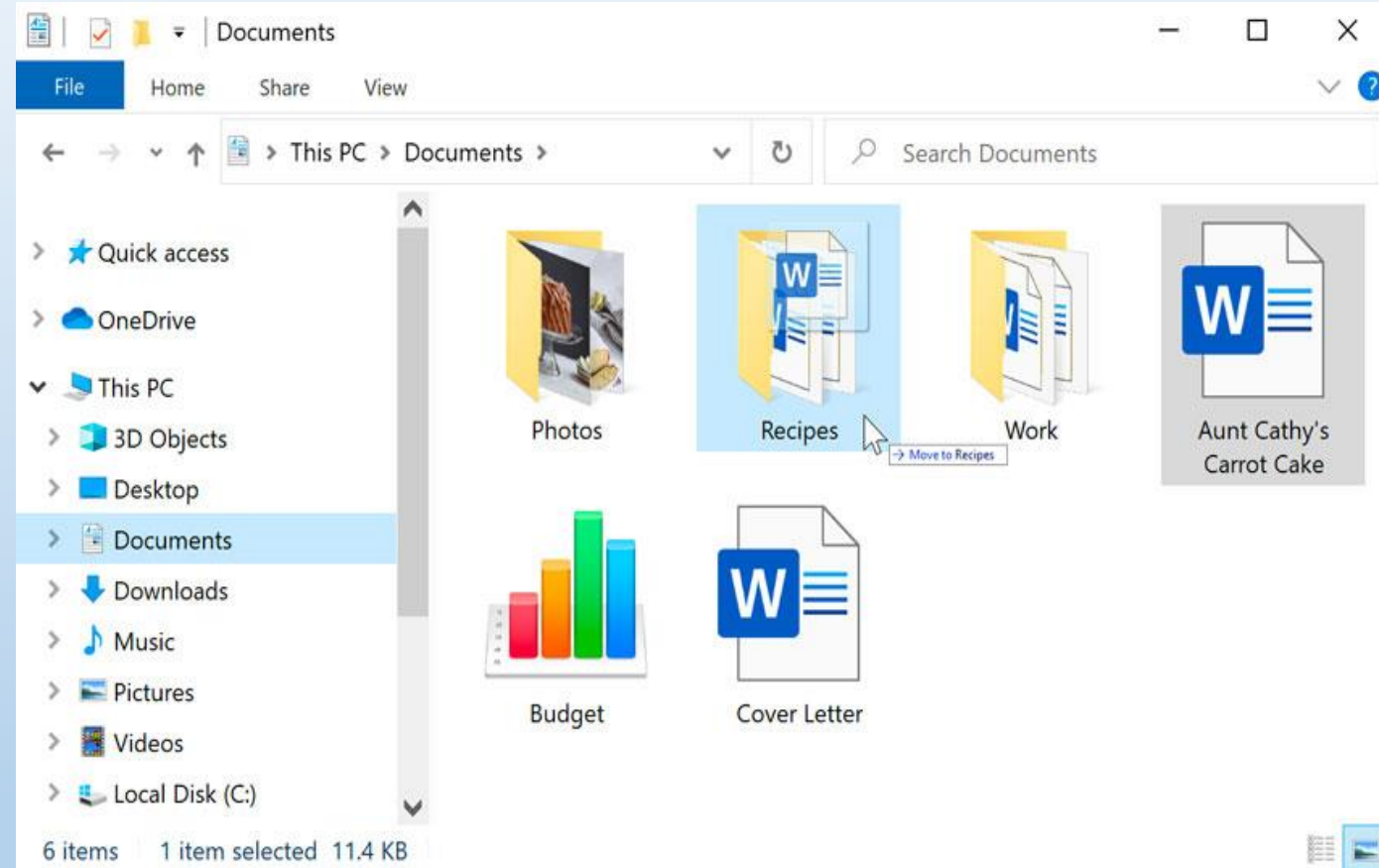


# Moving and deleting files

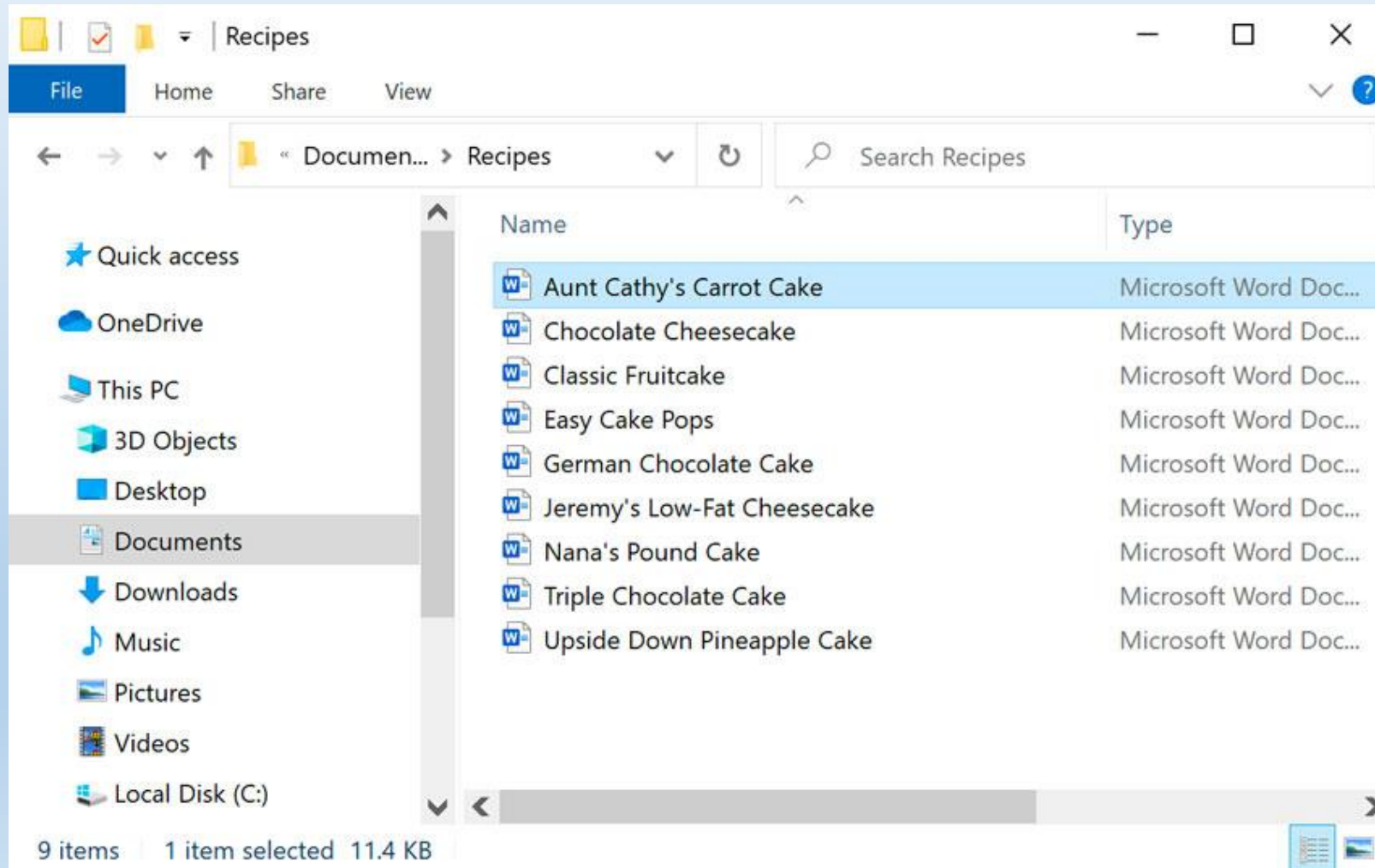
## To move a file:

It's easy to move a file from one location to another. **For example,** you might have a file on the desktop that you want to move to your Documents folder.

1. Click and drag the file to the desired location.



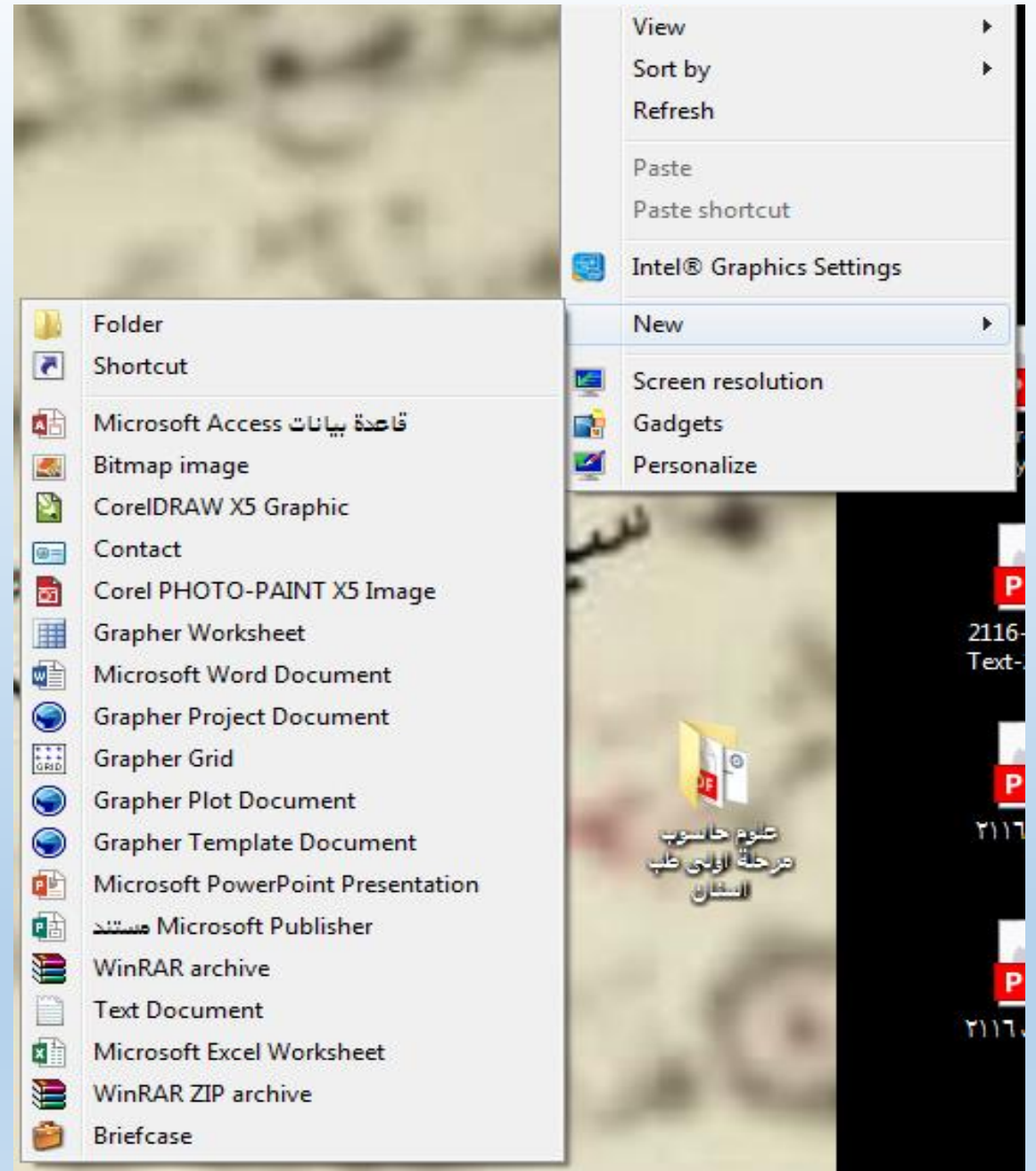
2. Release the mouse. The file will appear in the new location. In this example, we have opened the folder to see the file in its new location.



## To create a new folder:

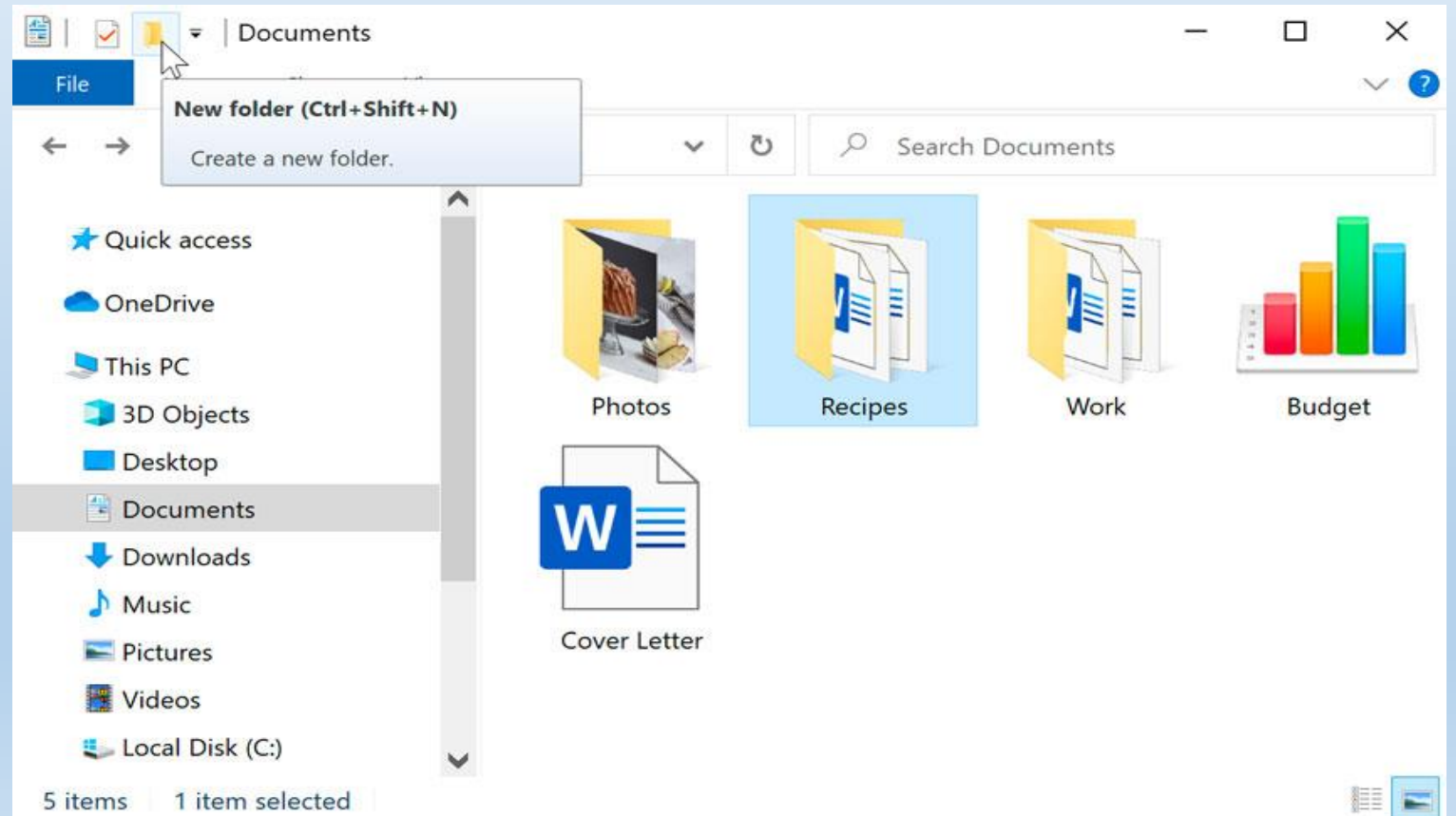
To create a new folder, there are two ways

1- Either by right-clicking on any empty place on the desktop if we need to create a new folder on the desktop, then we choose New, then we choose Folder.



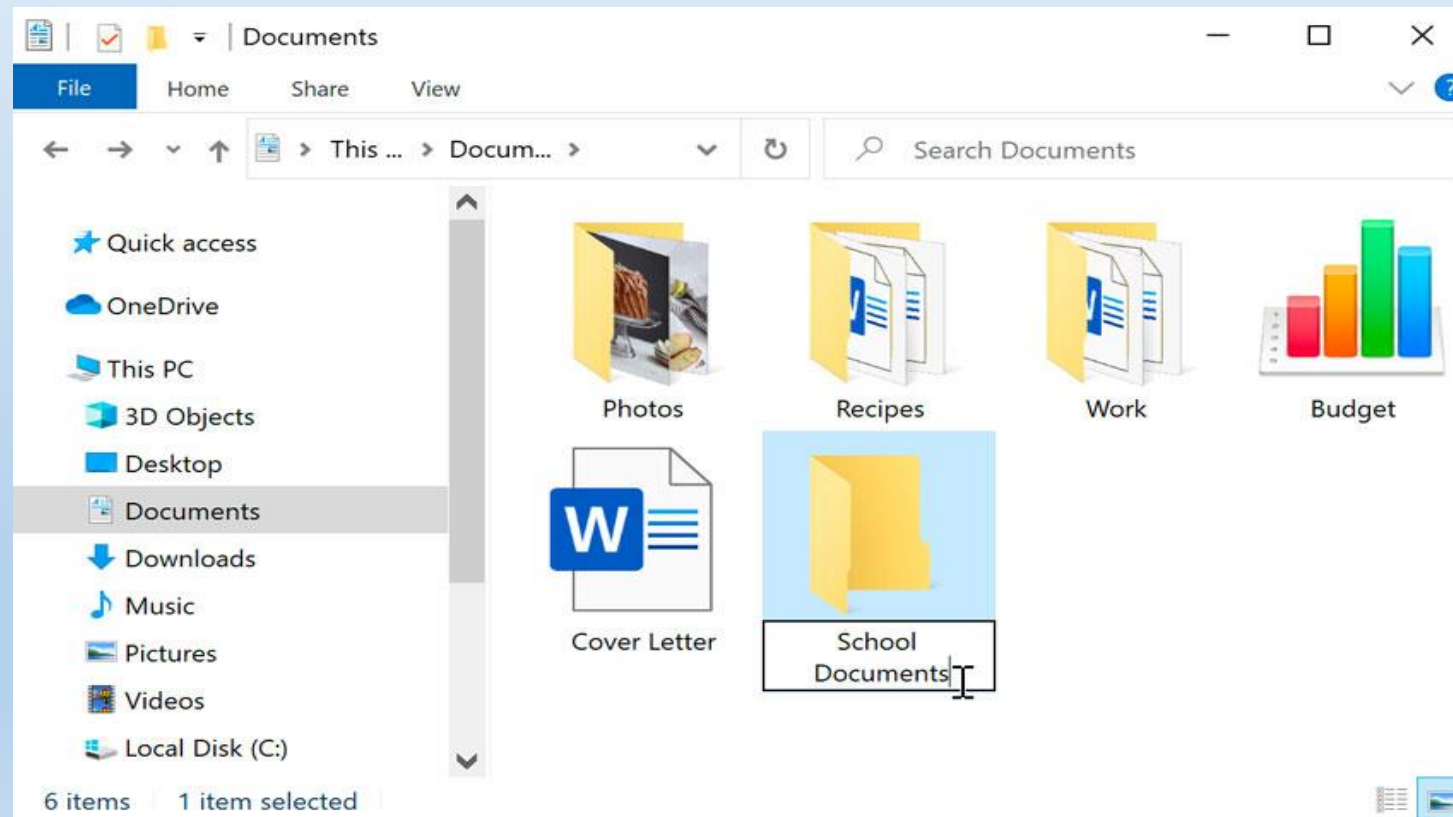
## To create a new folder:

2. Within File Explorer, locate and select the **New folder** button. You can also **right-click** where you want the folder to appear, then select **New > Folder**.



2. The new folder will appear. Type the desired name for the folder and press Enter. In our example, we'll call it School Documents.

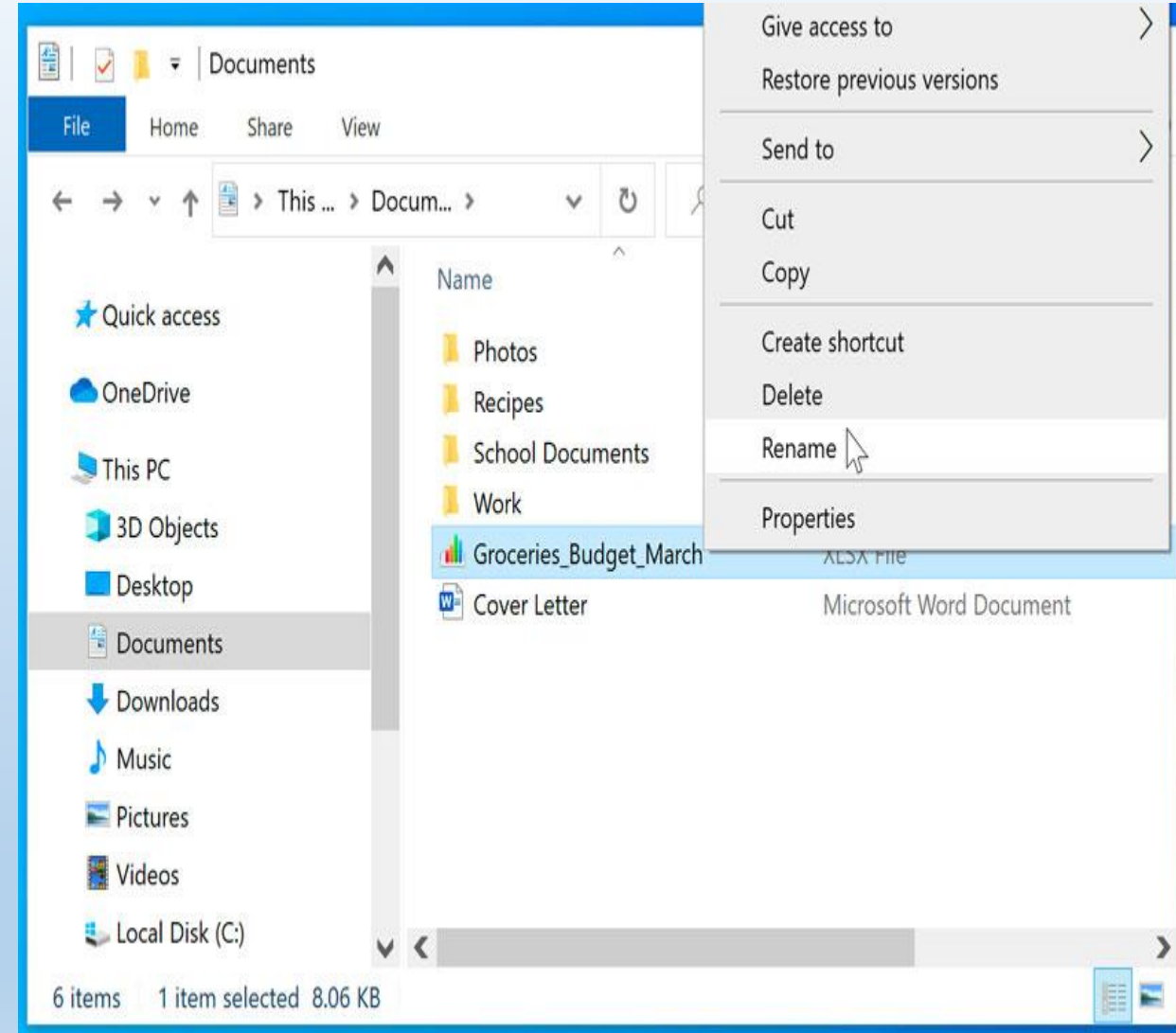
3. The new folder will be created. You can now move files into this folder.



## To rename a file or folder:

You can change the name of any file or folder. A unique name will make it easier to remember what type of information is saved in the file or folder.

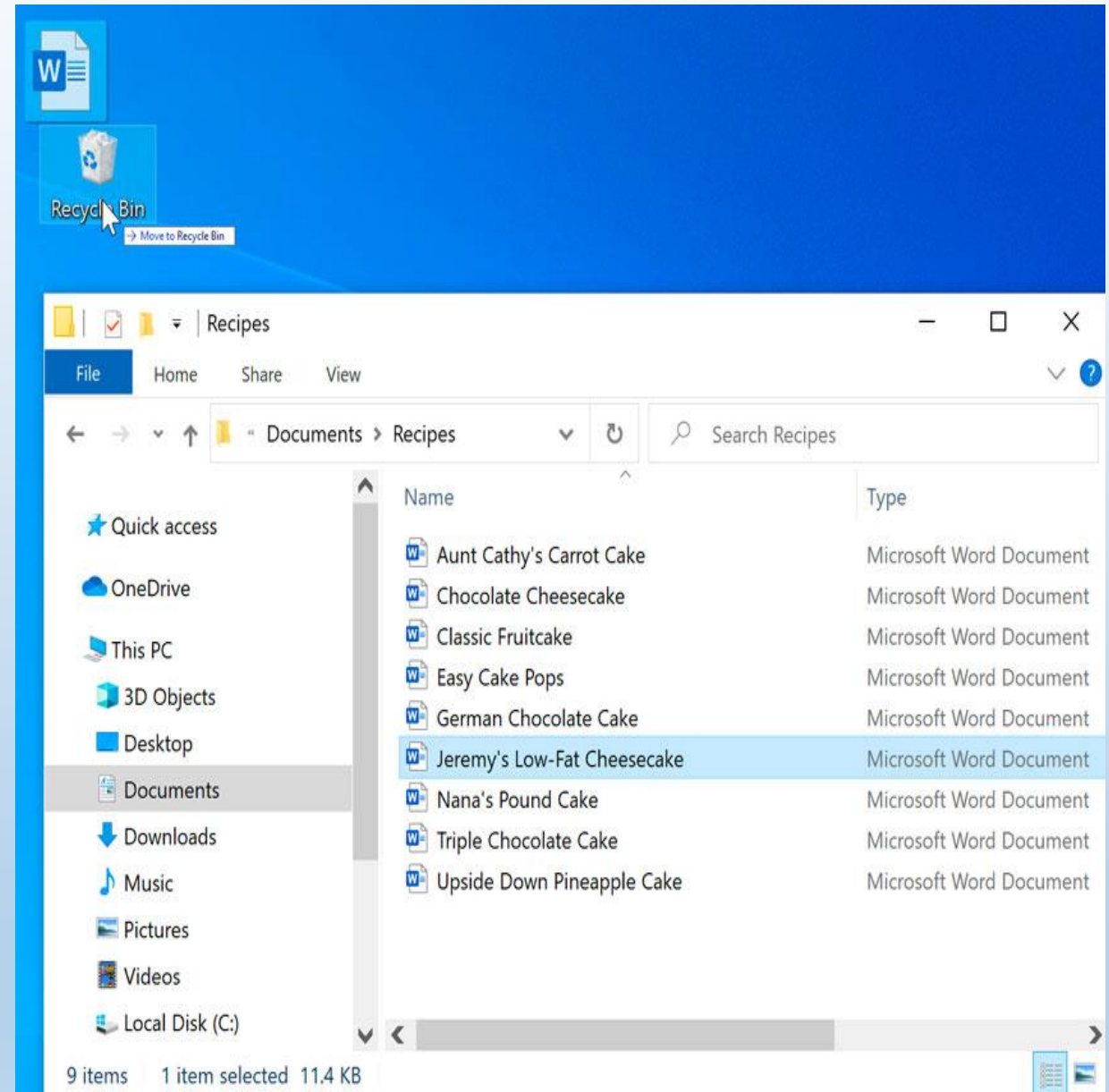
right-click the folder and select Rename from the menu that appears.



## To delete a file or folder:

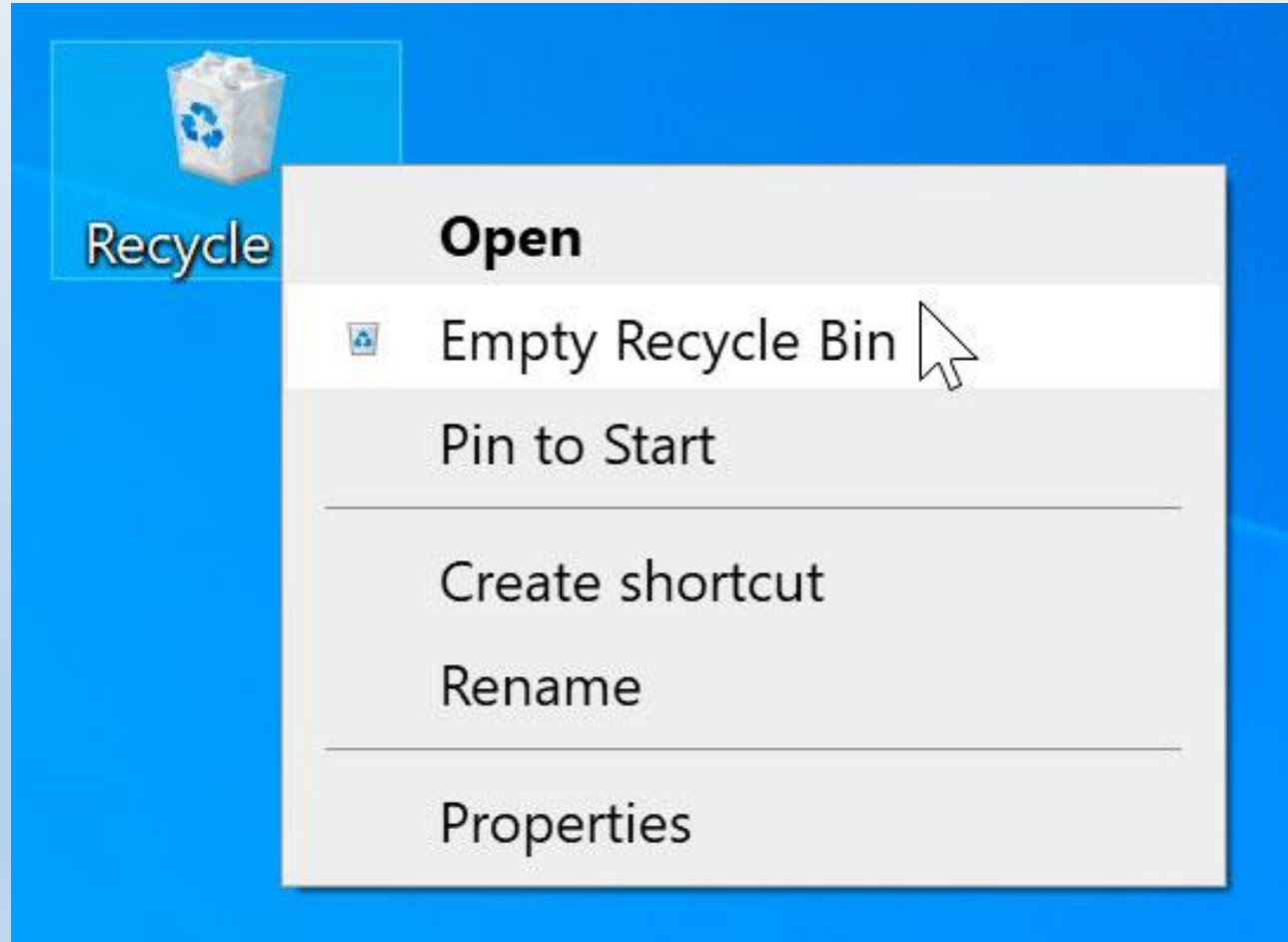
If you no longer need to use a file, you can delete it. When you delete a file, it is moved to the Recycle Bin. If you change your mind, you can move the file from the Recycle Bin back to its original location. If you're sure you want to permanently delete the file, you will need to empty the Recycle Bin.

1. Click and drag the file to the Recycle Bin icon on the desktop. You can also click the file to select it and press the Delete key on your keyboard.





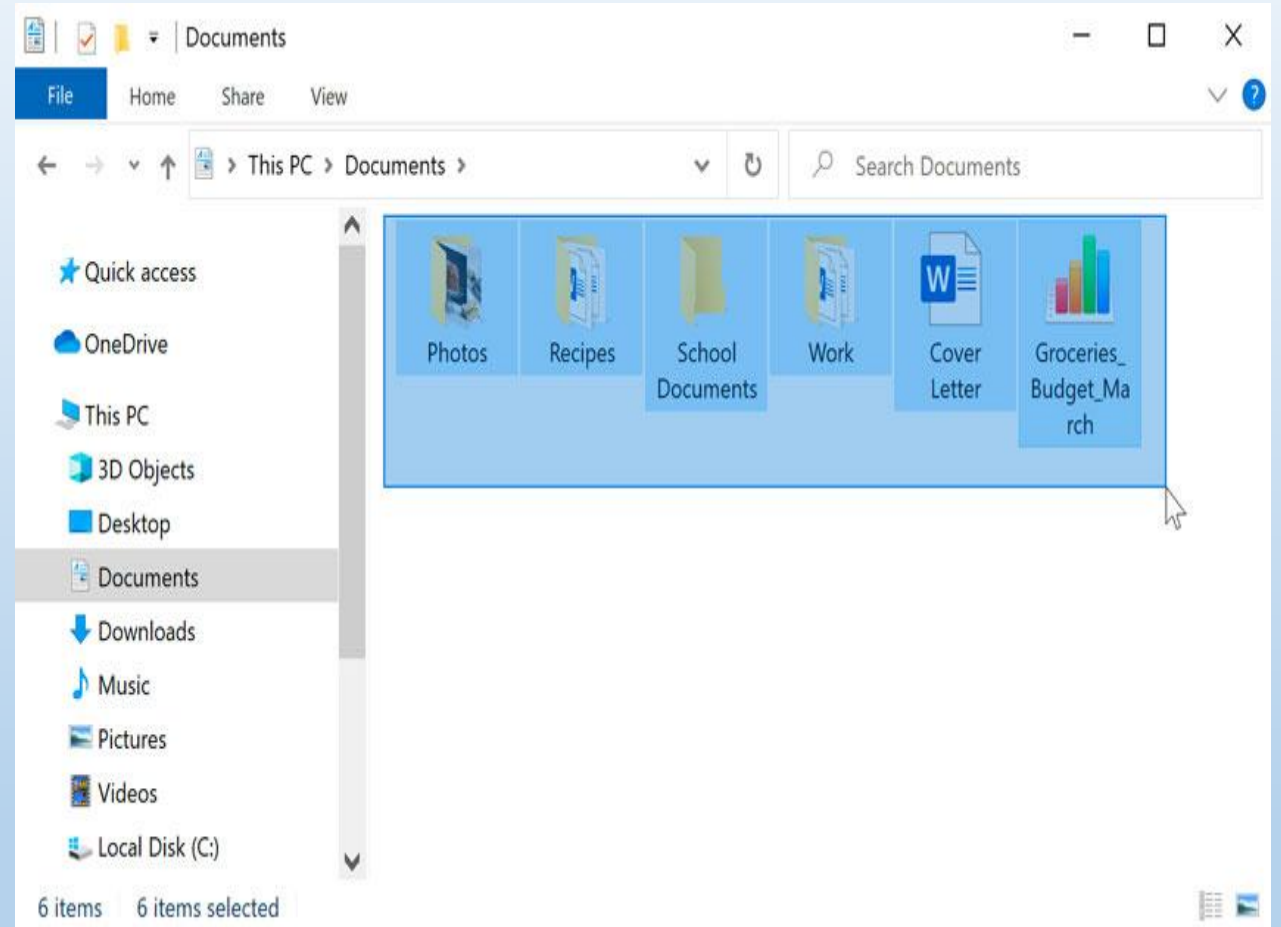
To permanently delete the file, right-click the **Recycle Bin** icon and select **Empty Recycle Bin**. All files in the Recycle Bin will be permanently deleted.



## Selecting more than one file

Here are a few ways to select more than one file at a time:

If you're viewing your files as icons, you can click and drag the mouse to draw a box around the files you want to select. When you're done, release the mouse; the files will be selected. You can now move, copy, or delete all of these files at the same time.





# Lecture 4

## Working with word 2010

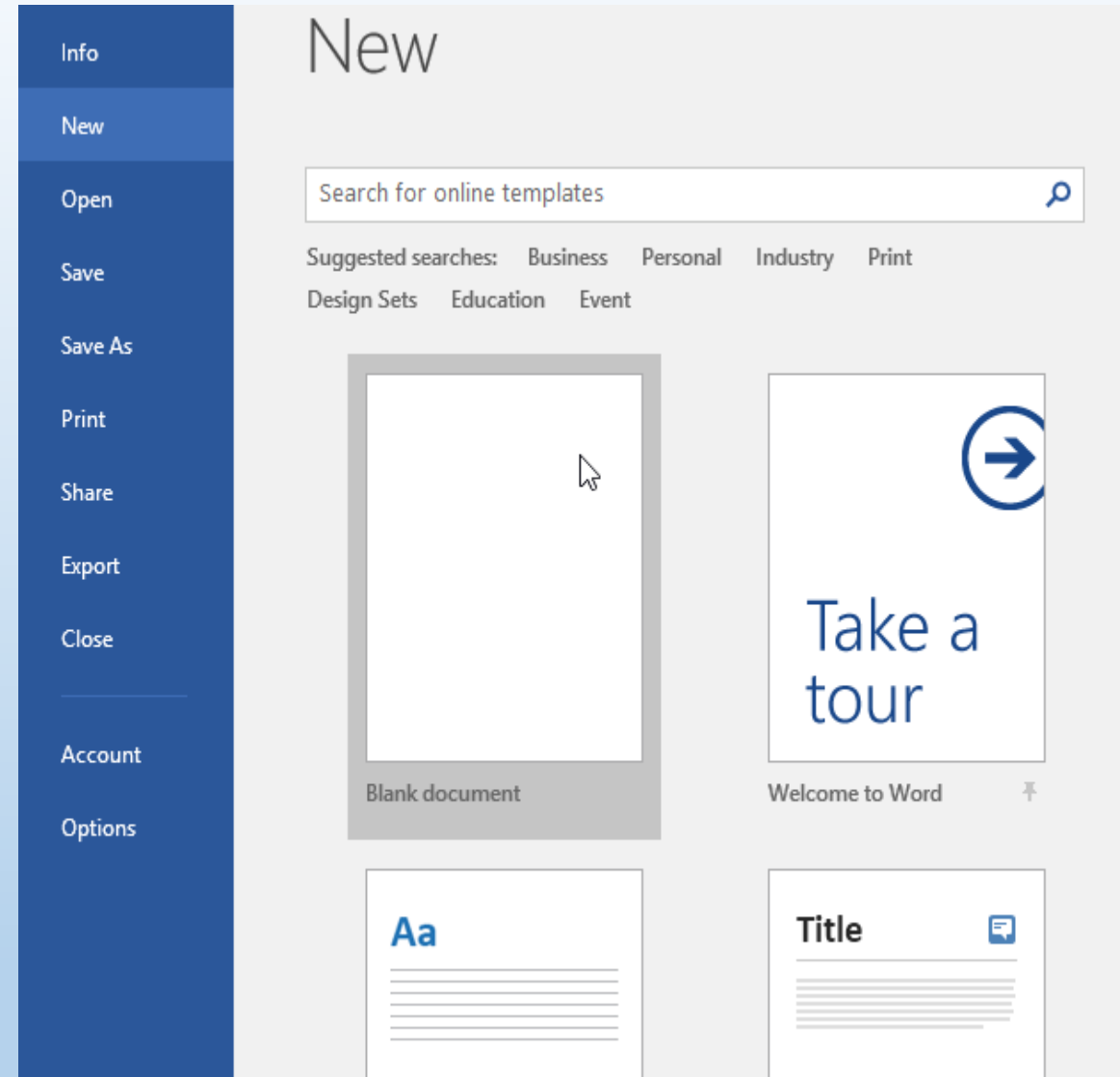
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# Getting to know Word 2010

Word 2010 is designed to help you create professional-quality documents. Word can also help you organize and write documents more efficiently

## The Word interface

When you open Word for the first time, the Start Screen will appear. From here, you'll be able to create a new document, choose a template, and access your recently edited documents. From the Start Screen, locate and select Blank document to access the Word interface.



File Home Insert Design Layout References Mailings Review View Tell me... Olenna M... Share

Clipboard Paste

Calibri (Body) 11

B I U abc x<sub>2</sub> x<sup>2</sup> A

A ab A Aa A A

Paragraph

Styles

AaBbCcDc AaBbCcDc AaBbCc

Normal No Spacing Heading 1

Editing

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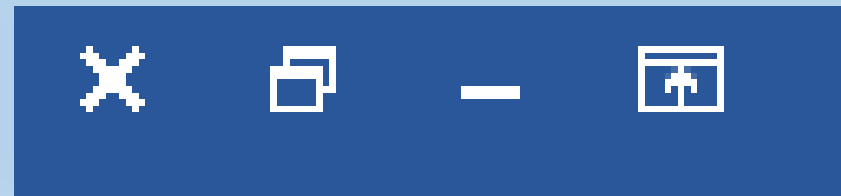
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1. The Quick Access Toolbar lets you access common commands no matter which tab is selected. By default, it includes the Save, Undo, and Redo commands.
2. The Ribbon contains all of the commands you will need to perform common tasks in Word. It has multiple tabs, each with several groups of commands.
3. Each group contains a series of different commands. Simply click any command to apply it. Some groups also have an arrow in the bottom-right corner, which you can click to see even more commands.
4. The Ruler is located at the top and to the left of your document. It makes it easier to make alignment and spacing adjustments.

5. Click and drag the vertical scroll bar to move up and down through the pages of your document.
6. This is where you'll type and edit text in the document.
7. From here, you can quickly see the number of words and pages in your document.
8. There are three ways to view a document:
  - Read Mode displays your document in full-screen mode.
  - Print Layout is selected by default. It shows the document as it would appear on the printed page.
  - Web Layout shows how your document would look as a webpage.
9. Click and drag the slider to use the zoom control. The number to the right of the slider bar reflects the zoom percentage.

The area outlined contains the minimize, maximize/restore and close buttons for the program window.

These three buttons are on almost every window that opens in a Windows based platform.





- When you click the **minimize button** the program becomes a button on the Windows taskbar located at the bottom of the screen



- When you click the **maximize / restore button** the program assumes the same shape and size it was before you minimized it. Or The program window will fill the screen.

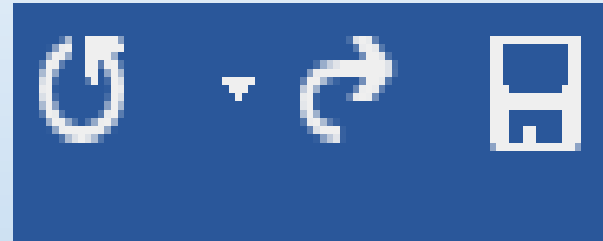


- When you click the **close button** the program will ask you if you want to save the changes if you have made any changes. Once you have responded to this question the program will close.

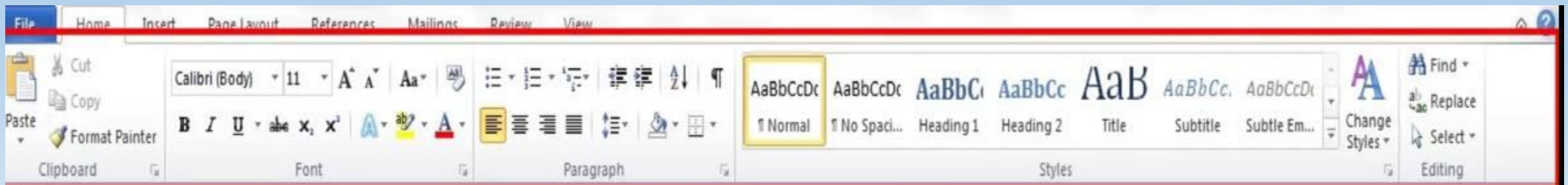


The area outlined in red is called the quick access toolbar. It contains the most commonly used commands in Microsoft Word:

- Save
- Undo
- Repeat



**Microsoft Office 2007 & 2010 use what is referred to as the "Ribbon" interface. The area outlined in red comprises the Ribbon.**

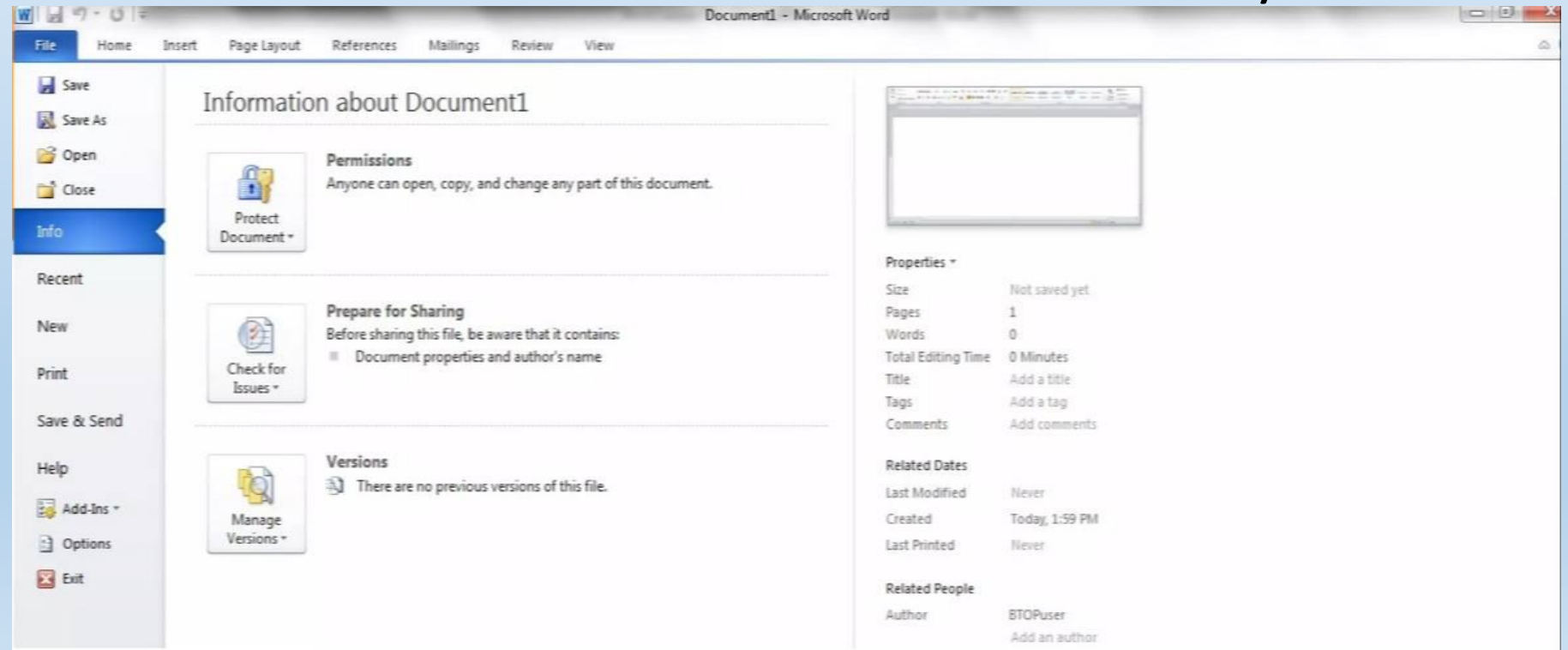


- The Words File, Home, Insert, etc... outlined in red are referred to as tabs.

Each tab has several Groups attached to it.



1. The **File Tab menu** contains the commands most commonly associated with the file.



2. The **Home Tab** Groups contain the commands most commonly associated with the formatting and editing of text.

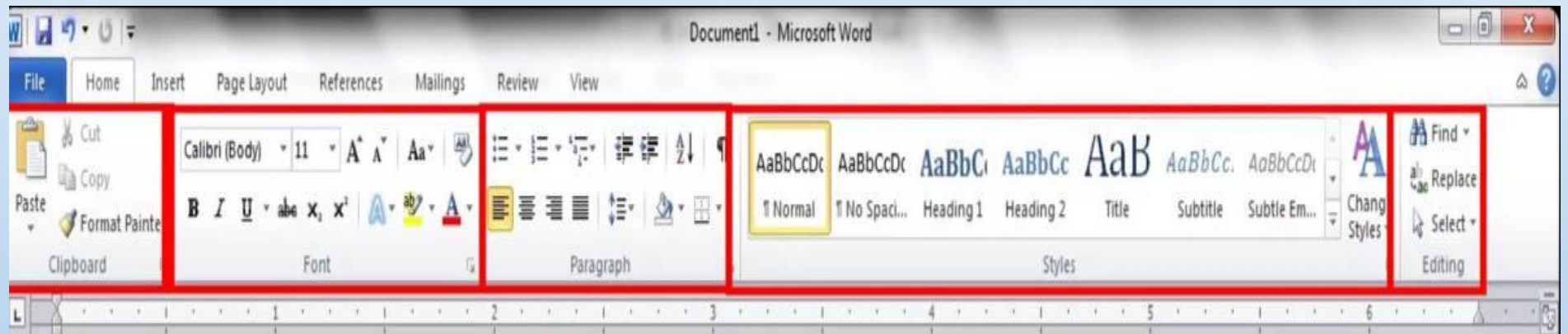
- **Clipboard**

- **Font**

- **Paragraph**

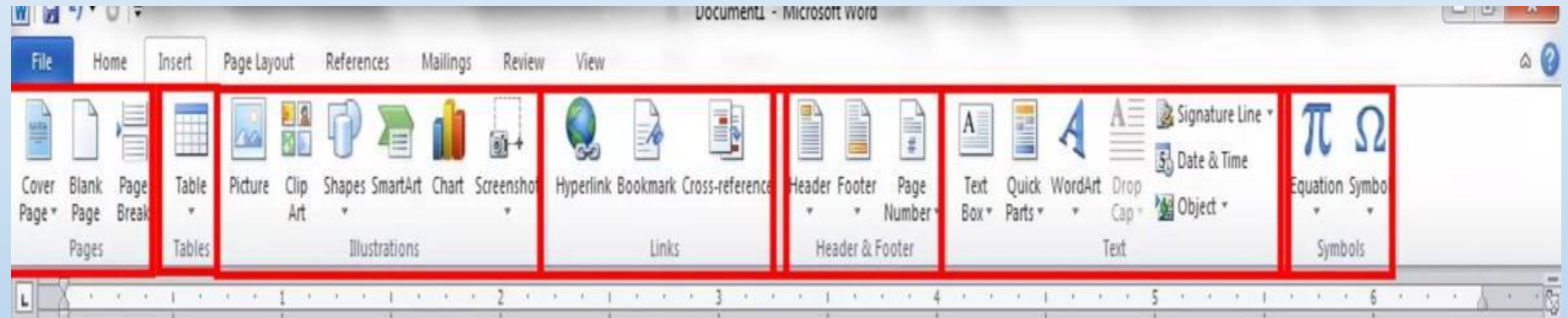
- **Styles**

- **Editing**



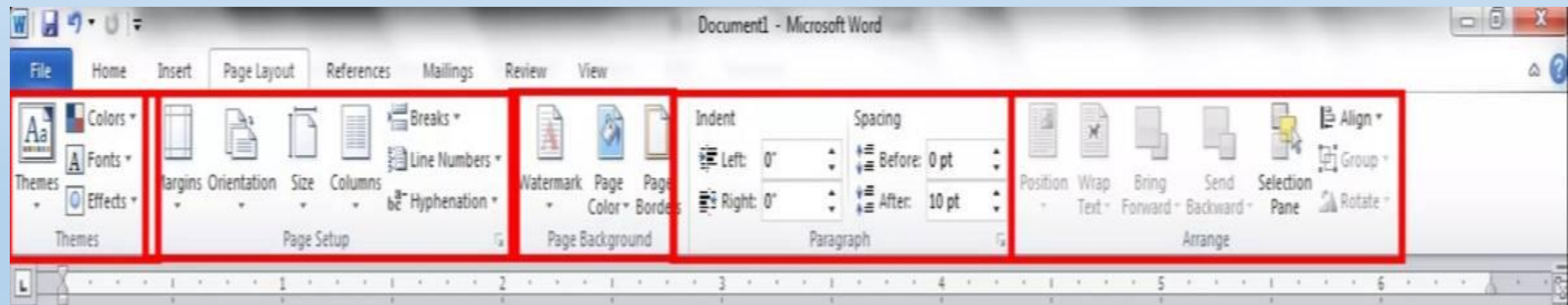
3. The **Insert Tab** Groups contain the commands most commonly associated with adding something to the document.

- Pages
- Tables
- Illustrations
- Header/Footer
- Links
- Text
- Symbols



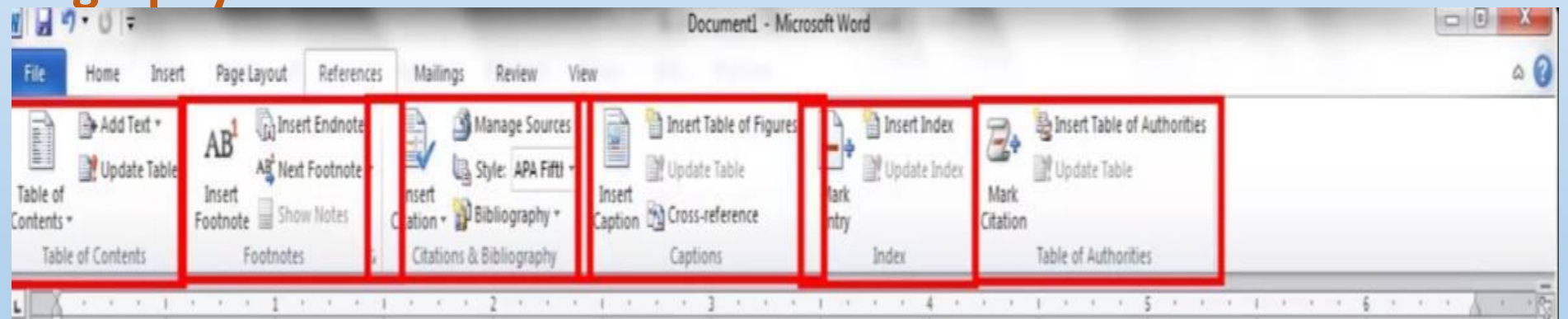
4. The **Page Layout** Groups contain the commands most commonly associated with settings that would affect the entire page or document.

- Themes
- Page Setup
- Page Background
- Paragraph
- Arrange



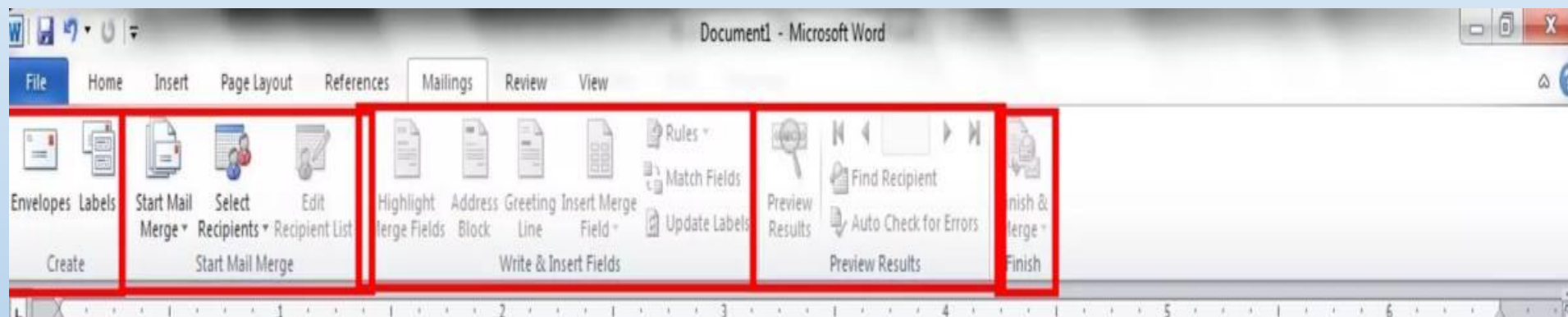
5. The **References Groups** contain the commands most commonly associated with writing a research paper, essay, term paper or similarly formal documents.

- **Table of Contents**
- **Footnotes**
- **Citations & Bibliography**
- **Captions**
- **Index**
- **Table of Authorities**



6. The **Mailings Tab** groups contain the commands most commonly associated with documents and files created for mass mailing.

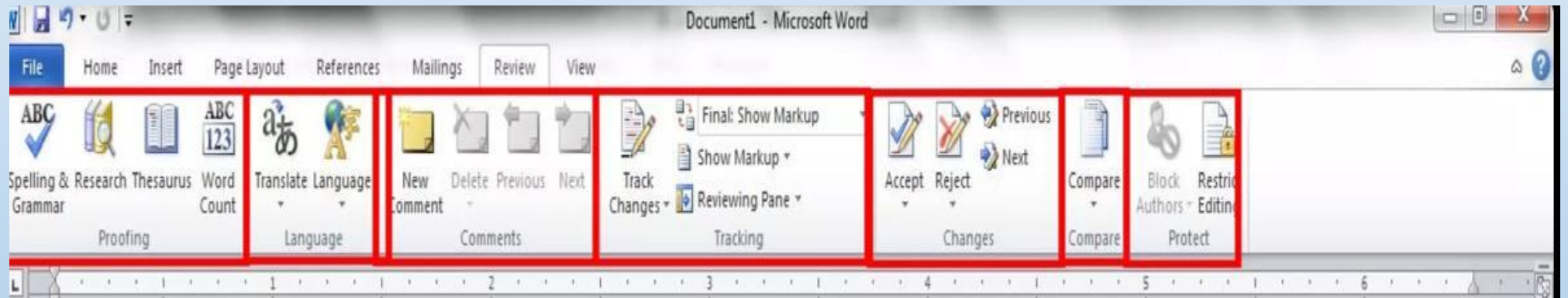
- **Create**
- **Start**
- **Mail Merge**
- **Write & Insert**
- **Fields**
- **Preview**
- **Results**
- **Finish**





7. The **Review Tabs groups** contain the commands most commonly associated with documents which are shared or being prepared for publication.

- **Proofing**
- **Language**
- **Comments**
- **Changes**
- **Tracking**
- **Compare**
- **Protect**



8. The **View Tab groups** contain the commands most commonly associated with the variety of ways you can "look at" a document or documents.

- **Document**

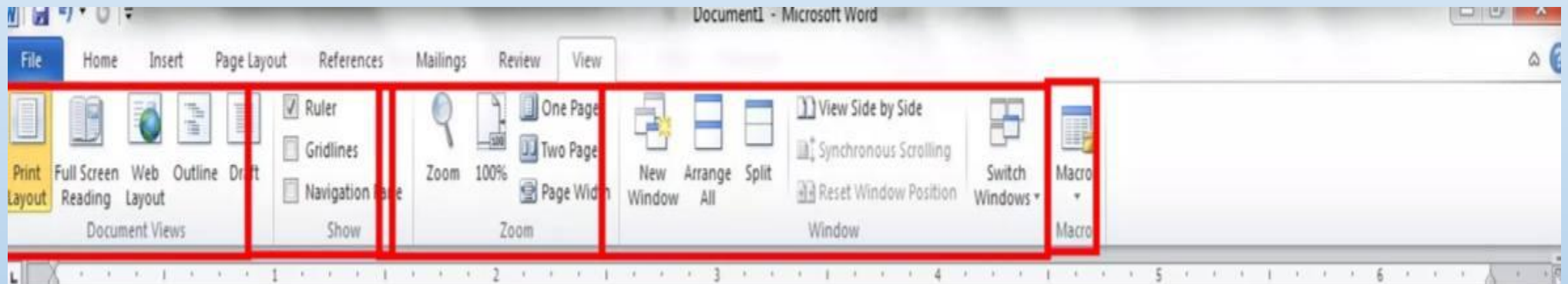
- **Views**

- **Show**

- **Zoom**

- **Window**

- **Macros**





# Lecture 5

## Working with word 2

**Assistant Lecturer. Shahad Laith**

# You can use Word to accomplish the following tasks:

1. Type and edit text.
2. Copy and move text from one location to another.
3. Format text and paragraphs with fonts, colors, and other elements.
4. Format and design pages.
5. Enhance documents with tables, charts, graphics, screenshots.
6. Use Mail Merge to create form letters and mailing labels.
7. Share documents securely.

- **The title bar** displays the name of the document and the name of the program.
- Until you give a new document a different name, its temporary name is **Document 1**.
- **Quick Access toolbar**: located in the left side of the title bar which includes buttons for saving a document and for undoing, redoing, and repeating a change.
- **Ribbon Display Options button**: located in the right side of the title bar, you use to hide or show the Ribbon and tabs, the resizing buttons, and the program Close button.
- **The File tab** provides access to Backstage view where you manage files and the information about them.
- **Backstage view**: includes commands related to working with documents, such as opening, printing, and saving a document.

- **the Tell Me box**, which you can use to find a command or access the Word Help system,
- **the Share button**, which you can use to save a document to the Cloud.
- The document window displays the current document.
- You **enter** text and format your document in the document window.
- The **rulers** appear in the document window in Print Layout view.

- **The horizontal ruler:** displays left and right document margins as well as the tab settings and paragraph indents, if any, for the paragraph in which the insertion point is located.
- **The vertical ruler:** displays the top and bottom document margins.
- **The vertical and horizontal scroll bars:** are used to display different parts of the document in the document window.
- **The scroll bars** include scroll boxes and scroll arrows, which you use to scroll.

- **Status bar:** Located at bottom of Program window and displays the page number of the current page, the total number of pages and words in the document, and the status of spelling and grammar checking.
- It also includes the **view buttons**, the zoom slider, and the Zoom level button.
- **The view buttons** on the status bar allow you to display the document in Read Mode, Print Layout, or Web Layout view.



- **Red wavy** :line under a word indicates a possible misspelling or a repeated word;
- **Blue wavy** line under text indicates a possible grammar error.
- **Spelling and grammar** checking is one of the many automatic features you will encounter as you type.
- **AutoCorrect:** automatically makes typographical adjustments, detects, and adjusts typing errors, certain misspelled words, and incorrect capitalization as you type.

## Automatic features that appear as you type in Word.

- **AutoComplete** suggests text to insert quickly into your documents.
- **Press [Enter]** to insert the text suggested by the Screen Tip; continue typing to reject the suggestion.
- **Pressing [Backspace]** removes the character before the insertion point.
- **Pressing [Delete]** removes the character after the insertion point

# Save a Document

first time you save a document, the Save As screen opens.

The default filename is based on the first few words of the document.

press **[Ctrl][S]** to save a document.

# Select Text

- Before deleting, editing, or formatting text, you must select the text.
- Formatting marks are special characters that appear on your screen but do not print.
- Selecting text involves clicking and dragging the left click pointer across the text to highlight it.

# Methods for selecting text

- To select any amount of text: Drag over the text.
- To select a word: Double-click the word.
- To select a line of text: Move the pointer to the left of the line, then click.
- To select a sentence: Press and hold [Ctrl+L], then click the sentence.
- to select entire document: Triple-click with the pointer to the left of any text; press [Ctrl][A].

# Find and Replace Text

- Using the **Replace** command, you can find and replace all occurrences of specific text at once, or you can choose to find and review each occurrence individually.
- Using the **Find** command, you can locate and highlight every occurrence of a specific word or phrase in a document.

# Types of indents

- **Left indent:** The left edge of a paragraph is moved in from the left margin.
- **Right indent:** The right edge of a paragraph is moved in from the right margin.
- **First line indent:** The first line of a paragraph is indented more than the subsequent lines.
- **Hanging indent:** The subsequent lines of a paragraph are indented more than the first line.
- **Negative indent (or Out dent):** The left edge of a paragraph is moved to the left of the left margin.

# Add Bullets and Numbering

- Formatting a list with bullets or numbering can help to organize the ideas in a document.
- A bullet is a character, often a small circle, that appears before the items in a list to add emphasis.
- Formatting a list as a numbered list helps illustrate sequences and priorities.



# Add Headers and Footers

- **A header** is text or graphics that appears at the top of every page of a document.
- **A footer** is text or graphics that appears at the bottom of every page.
- headers and footers often contain the title of the publication or chapter, the name of the author, or a page number.
- When the header and footer areas are open, the document text is dimmed and cannot be edited.