Lecture 2

How memory is measured:

Memory is divided into millions of units called bytes

Each byte contains 8 bits

1024 bytes = 1 kilobyte (kB)

1024 kB = 1 megabyte (MB)

1024 MB = 1 gigabyte (GB)

1024 GB = 1 terabyte (TB)

File sizes:

The file size of a simple Word document will be approximately 20 kB. A 12-page Word report with pictures will take up much more space – maybe 300 kB ¬ A 100-page user manual with photos and screenshots could be at least 2 MB in size ¬ Microsoft Excel, for example, takes up more than 1 GB of hard disk space.

Standard PC Memory: The amount of memory a computer needs has increased as computers have improved – look at the following minimum RAM requirements:

¬ Windows 95 required 8 MB

¬ Windows 98 required 16 MB

¬ Windows XP requires 128 MB

¬ Windows Vista (home basic) requires 512 MB

¬ Windows 7 ,8 and 10 required 1 gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)

¬ Windows 11 required 4 gigabytes (GB) or greater

If you want to run additional software, you will need to increase these capacities significantly.

Utility software

Programs that let you do your work efficiently and securely, for example:

- backup software
- file compression software
- anti-virus software
- compilers

What is a virus?

➢ A virus is a program that replicates itself. It spreads by making copies of itself on a computer or by inserting computer code into program or operating system files.
➢ Viruses don't always damage files or computers, but they usually affect a computer's performance and stability.

How do I prevent viruses?

Install an antivirus program. To be most effective, an antivirus program should always be turned on, should scan incoming email, and should scan file access.

How can I help protect my computer from viruses?

1. Install an antivirus program and keeping it .
2. Do not open email attachments before scanning it.
3. Keep Windows updated.
4. Use a firewall.

Network areas

1. Personal area networks (PAN) ¬ TV remotes to televisions (very limited area)

2. Local area network (LAN) ¬Within office or building (limited outdoor area)

3. Metropolitan area network (MAN) ¬Wi-Fi access (networks cover a wider area than office or home)

4. Wide area network (WAN) ¬Between buildings ¬Countrywide ¬Internet

Network configurations:

Client–server

- Client computers connect to server
- Server provides resources

Peer-to-peer

- Computers have equal status

The user of a Web browser is effectively making client requests for pages from servers all over the Web.

- The browser itself is a client in its relationship with the computer that is getting and returning the requested HTML file

- The computer handling the request and sending back the HTML file is a server

Microsoft Word 2016

Insert Table:

The best way to add a table in your Word 2016 document is to use one of Word's table creation commands. The commands build a custom grid of rows and columns. click the Ribbon's Insert tab. In the Tablets group, the only item is the Table button. Click that button to see the Table menu, as illustrated here.
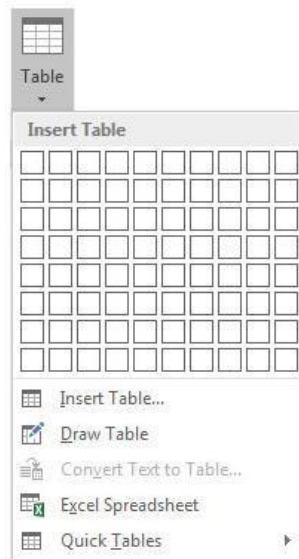
The best way to make a table in Word is to use the grid on the Table button's menu, as shown in the figure. Follow these steps:

- Click where you want the table in your document.
- Click the Insert tab.
- Click the Table button.

- Drag through the grid to set the desired number of rows and columns.
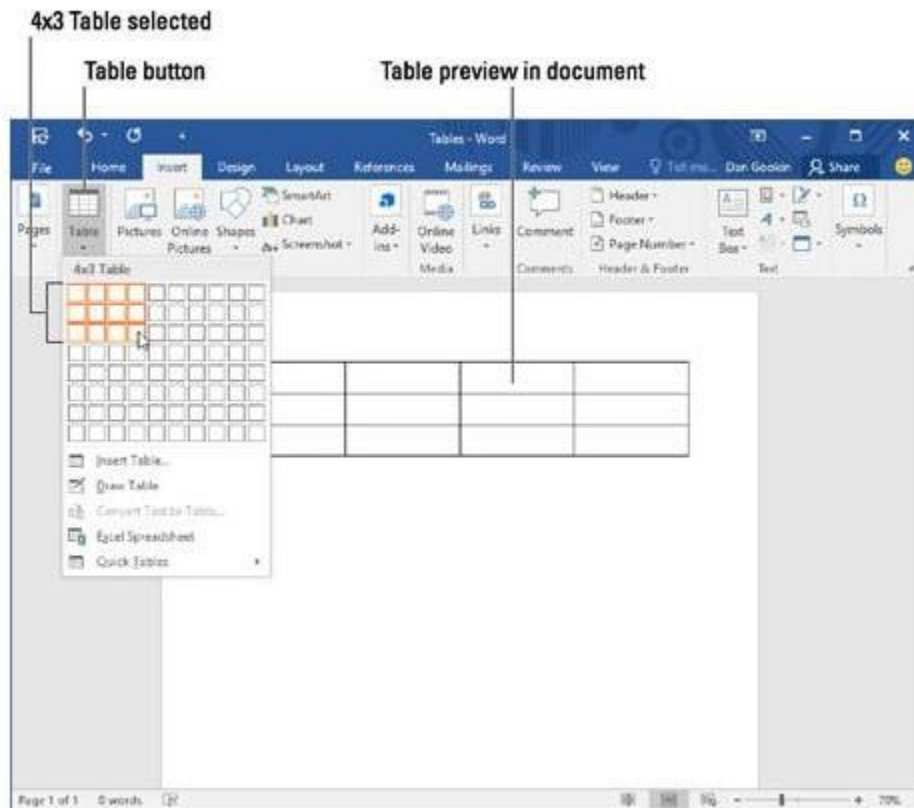

- You don't need to be precise; you can always add or remove rows or columns later. In this figure, a four-column-by-three-row table is created
- Release the mouse button to begin working on the table.
- To enter text, place the insertion point in any cell, then begin typing.

- To navigate between cells, use the Tab key or arrow keys on your keyboard. If the insertion point is in the last cell, pressing the Tab key will automatically create a new row.
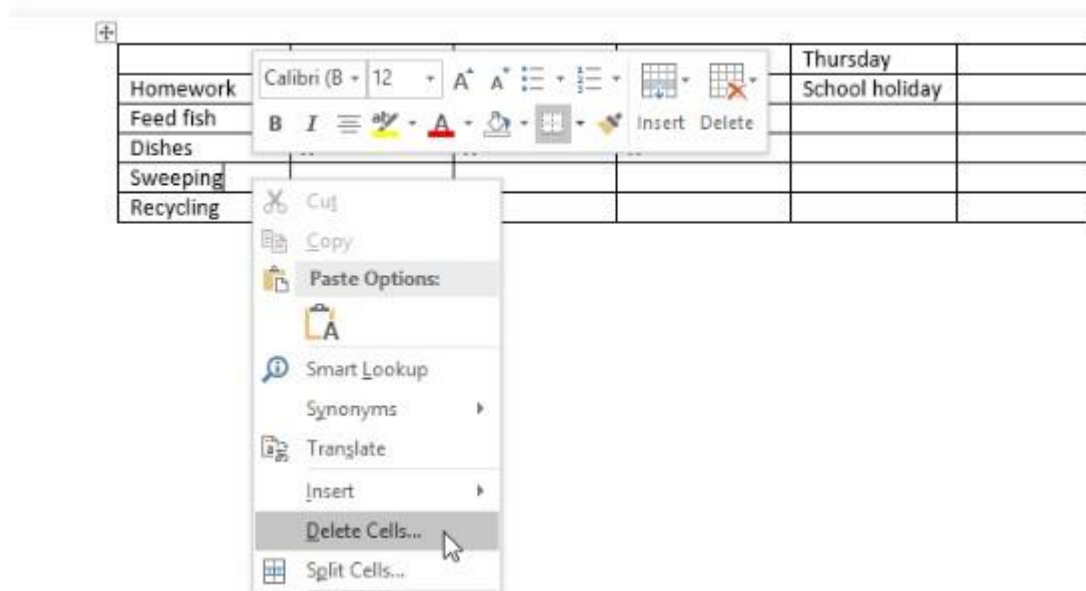
To add a row or column:

- you can right-click the table, then hover over Insert to see many row and column options.
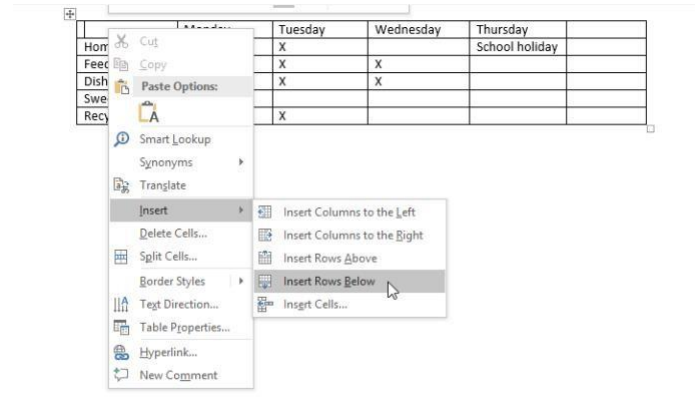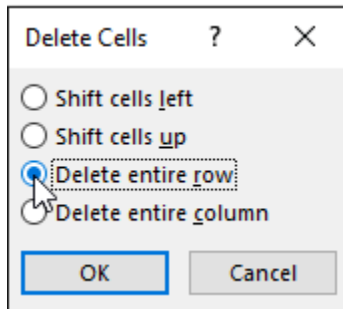

To delete a row or column:

- Place the insertion point in the row or column you want to delete.
- Right-click, then select Delete Cells from the menu.

- A dialog box will appear. Choose Delete entire row or Delete entire column, then click OK.
- The row or column will be deleted.

Delete Cells   ?   ✕

○ Shift cells left
○ Shift cells up
⦿ Delete entire row
○ Delete entire column

OK   Cancel

To Merge Cells in a Table:

1) Select the cells that you would like to merge in the table

2) Click on the Layout tab under Table Tools

3) Click the Merge Cells button in the Merge group

WELCOME TO PCBOOKS
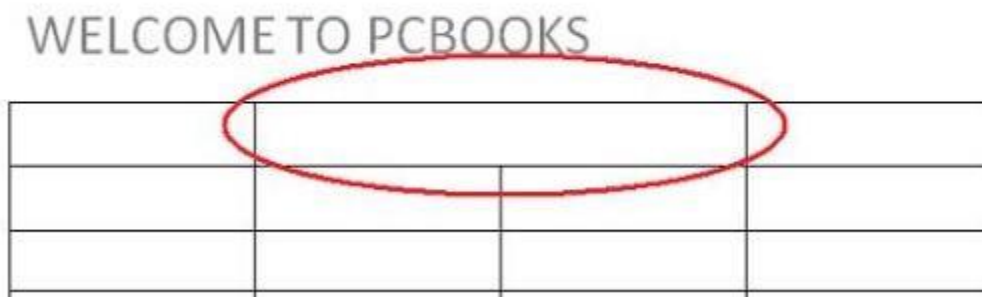
Splitting Cells

- Select the cell you want to split.
- Right click within the selected cell » select Split Cells... The Split Cells dialog box appears.
- In the Number of columns and/or Number of rows boxes, type or use the buttons to select the desired number of rows and/or columns.
- Click OK.

Asst.Lec: Mohammed Qasim Alazzawi
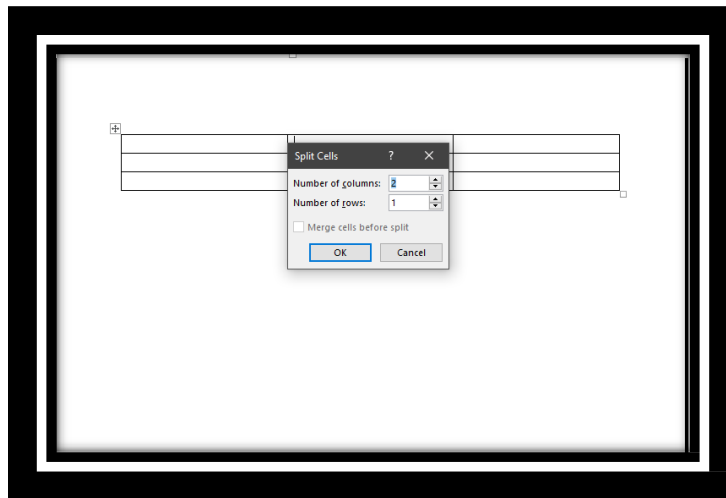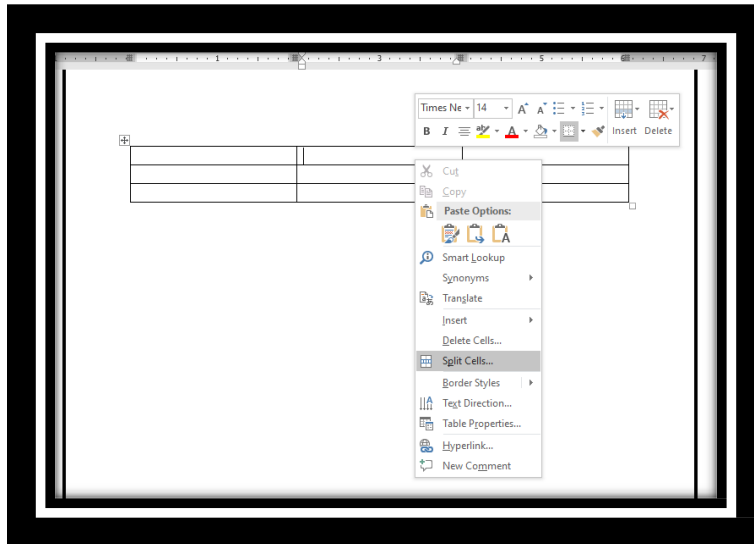
Format painter

Select the text or graphic that has the formatting that you want to copy. ...
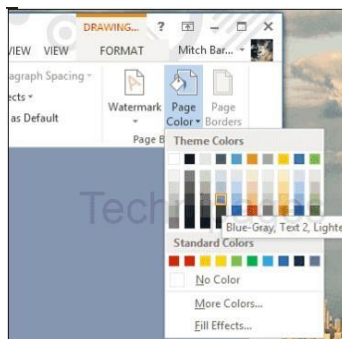
On the Home tab, click Format Painter. ...

Use the brush to paint over a selection of text or graphics to apply the formatting.
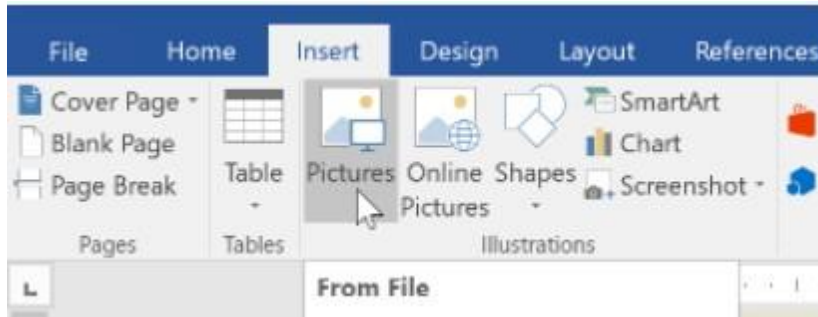

Setting a Background Color

1. Select the "Design" tab.
2. In the "Page Background" area, select "Page Color ".
3. Choose a desired color

insert a picture from a file:

we'll insert a picture saved locally on our computer.

1. Place the insertion point where you want the image to appear.
2. Select the Insert tab on the Ribbon, then click the Pictures command.

3. The Insert Picture dialog box will appear. Navigate to the folder where your image is located, then select the image and click Insert.
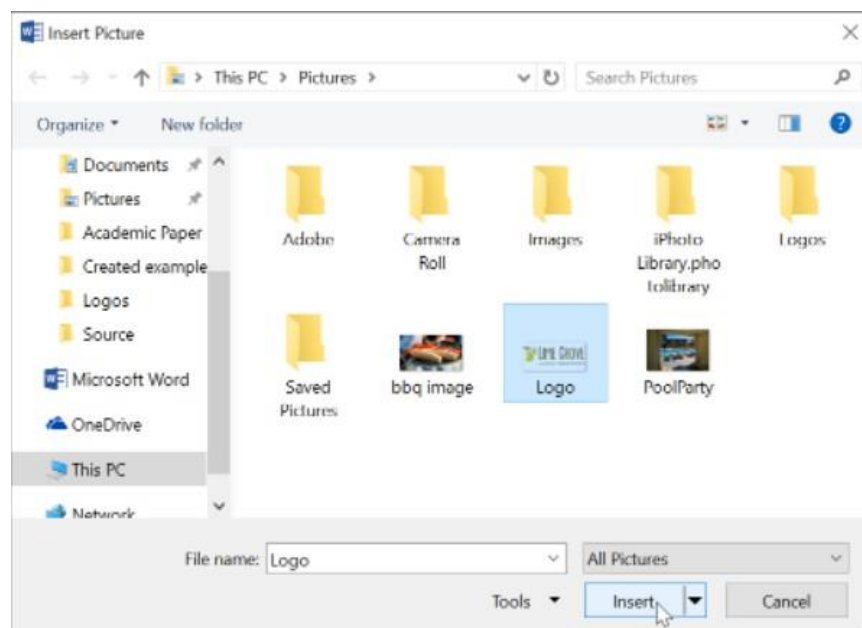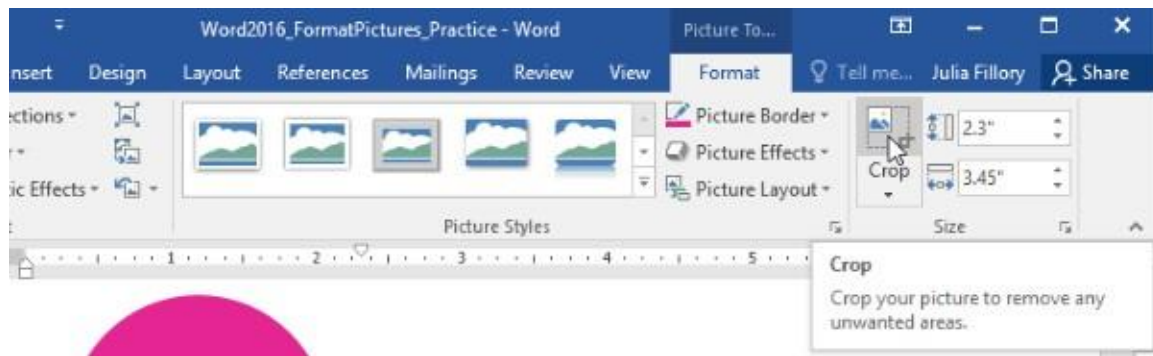

4. The image will appear in the document.

To crop an image:

When you crop an image, part of the picture is removed. Cropping can be useful if you're working with an image that's too big and you want to focus on only part of it.

1. Select the image you want to crop. The Format tab will appear.
2. From the Format tab, click the Crop command.

3. Cropping handles will appear on the sides and corners of the image. Click and drag any handle to crop the image

4. To confirm, click the Crop command again. The image will be cropped.

To Crop an image to shape

1. Select the image you want to crop, then click the Format tab.
2. Click the Crop drop-down arrow. Hover over Crop to Shape, then select the desired shape from the drop-down menu.
3. The image will be cropped to the chosen shape.

Insert a screenshot or screen clipping

1. Open a Word document.
2. Select the Insert tab on the ribbon, then click the Screenshot button. Then you will see two options, Available Windows and Screen Clipping.
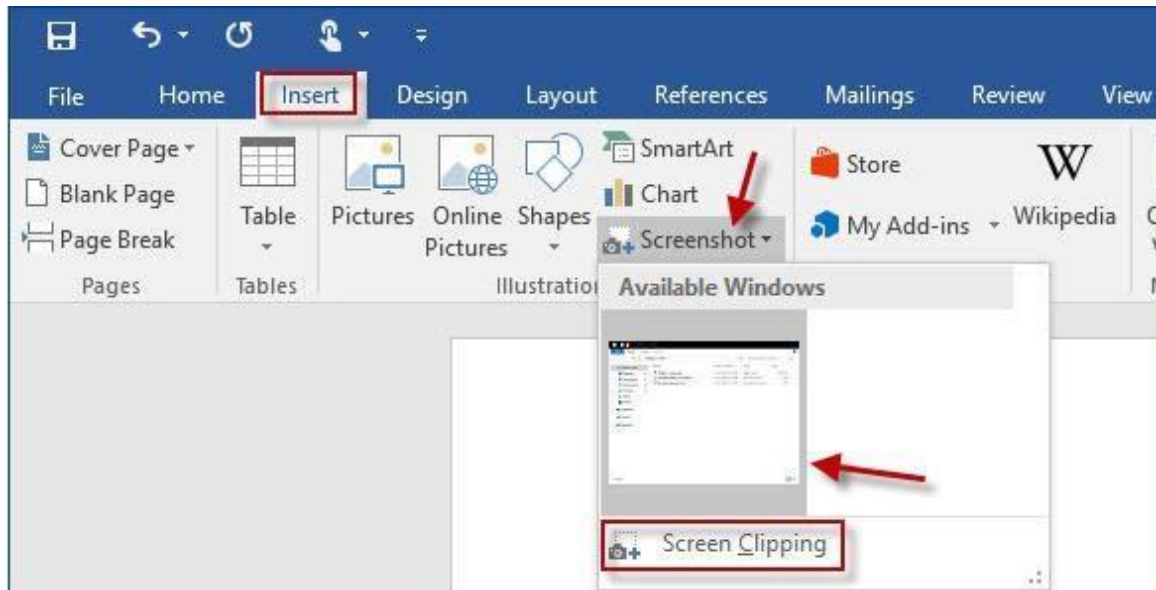
Under the Available Windows section, it shows thumbnail previews of opened windows on your desktop. If you want to get a screenshot of the available window, just select its thumbnail. Then its screenshot will be displayed in the Word Document.

If you want to manually take a screenshot from the screen, click the Screen Clipping button and then continue with the next steps.

3. After the Screen Clipping button is clicked, the Word screen temporarily exists, and a transparent haze covers the whole screen. Navigate to the area where you want to take a screenshot, then press and hold the left mouse button to select and highlight the area. In my example, I select the Windows logo on Windows 10 desktop.
4. Release the left mouse button. The selected area on the screen can be captured and displayed in the Word document. Also, the Picture Tools is opened. You can edit the screenshot as your desire.