



Bachelor in Computer Application (BCA)

Lab Report of

Fundamental and Computer Application

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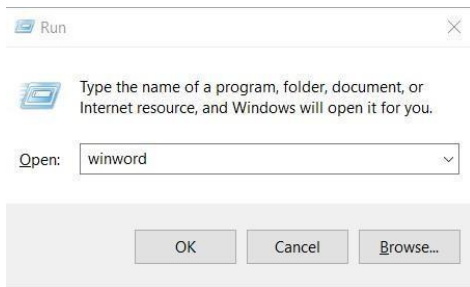
Workspace

MS-Word

Introduction to MS-Word

Microsoft Word is a word processor developed by Microsoft. It allows us to create, edit, format, save, print, delete and view a multidirectional text document. It allows you to create and edit personal and business documents, such as letters, reports, invoices, emails and books. By default, documents in word 2016 are saved with the .docx extension.

How to open or MS-Word



press key + R. Then the run

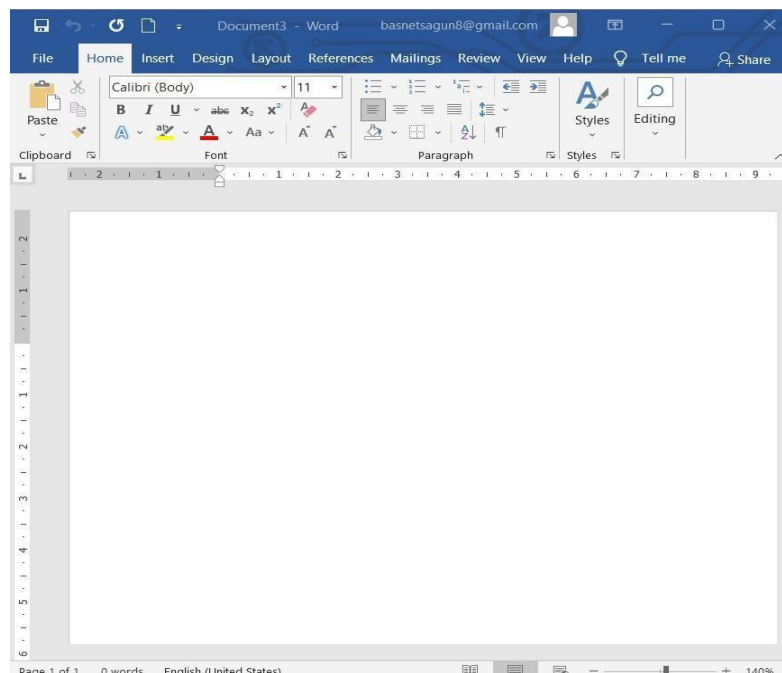
As shown in figure.

open option

Step III. Press OK button and now

MS-Word file is open.

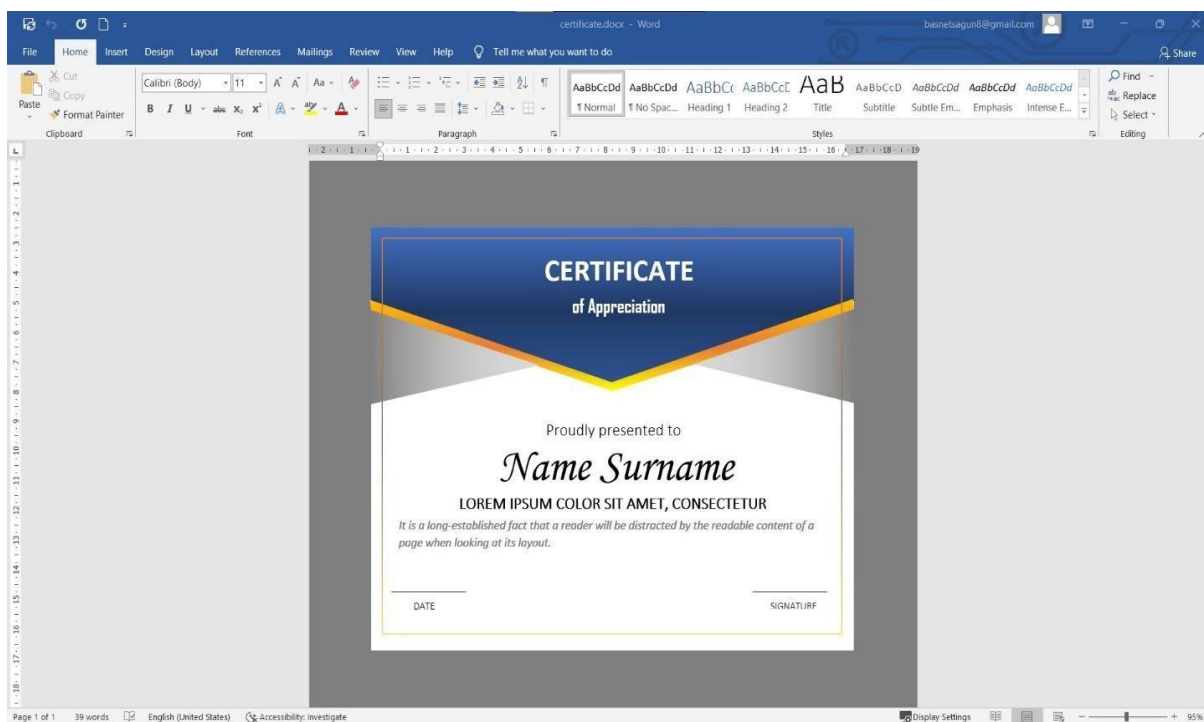
Following is the basic window which you get when you start the Word application.



1.Designing certificate in MS-Word

Steps

- At first create a 2 rectangle, first one should be bigger and second smaller than first one. Apply color to the bigger rectangle, Right click it and sent it to back.
- Inside the small rectangle make a blue color shape as shown in above figure with the help of curve shape. Again, with the help of curve shape make a yellow orange shape just bellow the blue shape as shown in the figure.
- Again, take a triangle shape and draw a shape as shown in above figure (shape is in gray color) and copy it, past it and rotate that copy shape to 90° and placed it right below the previous shape as shown in the above figure.
- Take a rectangle shape and draw it little smaller than previous small rectangle. Then go to shape format, then set shape fill to no fill. Then go to shapeoutline and apply the color as your wish. This step will create boarder like shape as shown in above figure with yellow red color.
- Now select text tool from shapes and type a text like above figure inside the certificate design.



2.Designing report card in Ms-word

Steps

- Take a newpage
- Go to design tab and click on page border.
- select a border which you like.
- Go to insert tab and select word art
- write the name of school or college inside it.
- select the box and go to formate tab.
- And goto texteffect and select transform and follow path and select the correct option.
- insert the logo of the school or school.
- Go to insert tab and select the shape option and click on draw text box.
- Go to insert tab and take a table.

Document1 - Word

File Home Insert Draw Design Layout References Mailings Review View Help

Calibri (Body) 11 A A A

1 Normal 1 No Spac... Heading 1 Heading 2 Title Subtitle

Find Replace Select

Page 1 of 2 38 words

Type here to search

81°F Sunny 12:04 PM 11/6/2021

Green peace Academy school

Marksheet of mid-annual Examination
(SECONDARY EDUCATION 2021)

Roll: _____ Class: _____

Student Name: Prekshya Acharya

subject	written	oral	Total
Math			
Science			
English			
Social			
Nepali			
Opt. math			
Com. Fundamental			
Grand Total:			
Result:			

PARENTS SIGNATURE _____ PRINCIPLE SIGNATURE _____

Designing Simple logo in MS-Word

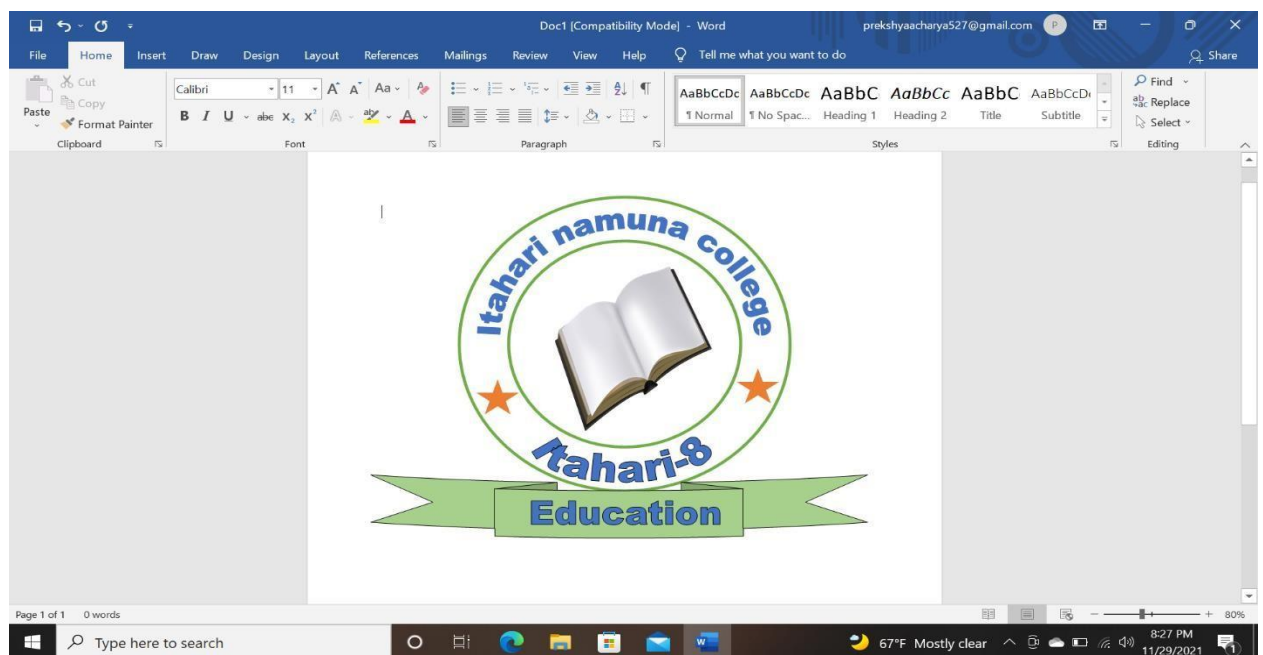
Steps

-First take a circle: hollow shape than draw in middle of the page. Give light green to that outline as in the fig.

-Insert word art and in the word art write college name and address. Go to text effect and click transformation and click the adjust the text which will be inside the circle.

-Again insert a shape in down side of the circle and adjust it at suitable position.

-Fill the color like green and insert the text over it.



Designing simple advertisement template in MS-Word

Steps

-First take a rectangle shape and draw it at the top of your MS-Word page. Give any color to that rectangle (In my case I have apply gray color). Then select that rectangle, go to shape format, go to edit shape and click edit points. Edit the bottom of that rectangle as shown in the figure below and insert logo of college and name of the college.

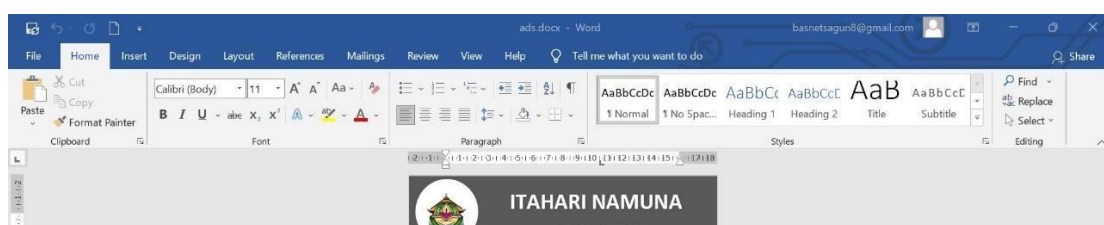
-Simple take 24-points star shape and draw it in side the page below the heading of the design which was created in Step I. Give a color to it (In my case I have apply black color). Then rotate it and place it like shown in above figure.

-Again take a rectangle: rounded corners shape than draw it inside the page then copy it again past it and apply black color to one of them and another white than send back that rectangle which is black then little rotate it as shown in the above figure. Group that 2 rectangles than again copy and paste it then moves that copy rectangles to another side as shown in the figure.

- Draw two 24-points star shapes of equal size or simply draw 1 stare than copy and paste it. Placed it like in the figure. Write any slogan in side that shape.

- Take a rectangle shape and draw in the bottom of that page as shown in the figure. Color it with gray and by inserting the text box write the address and contract of the college.

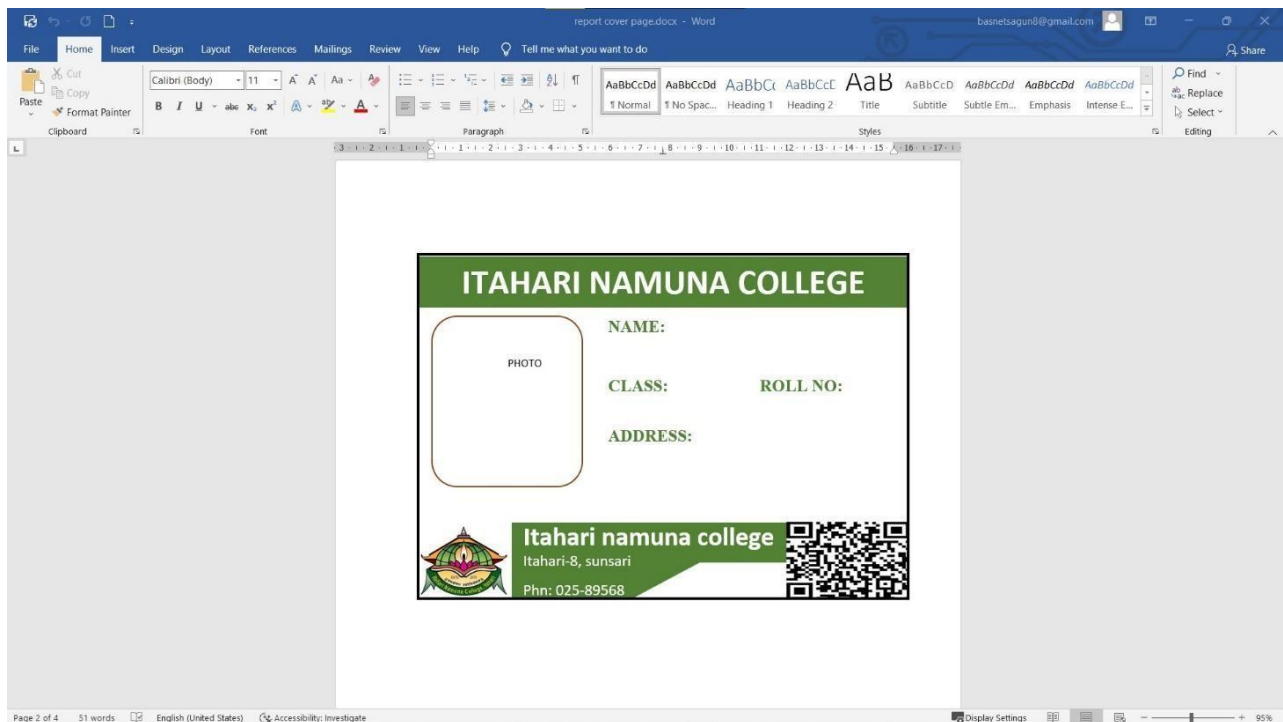
- Take a text box then make a box just above the bottom rectangle and write a text about the feature of the college.



Designing ID card in word

Steps

- Open new page – layout – margin – custom margin portrait
Select top = 0, left = 0, gutter = 0, and
gutter position = 0
- Select page setup – with width = 2.2 and height = 3.4
- Go to view – view multiple pages – page layout – page break
- Insert shape – format = 1 and circle = 1
- Add – fill color – fill picture – fill the details.



MS-Excel

Introduction to MS-Excel

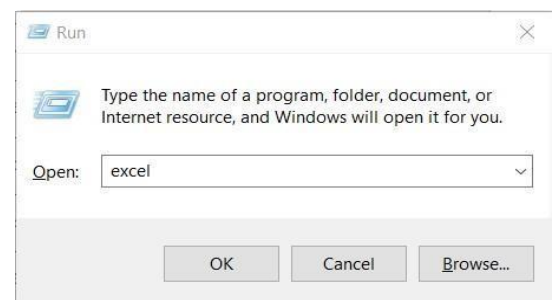
Microsoft Excel is a spreadsheet program used to record and analyze numerical and statistical data. Microsoft Excel provides multiple features to perform various operations like calculations, pivot tables, graph tools, macro programming, etc. By default, spreadsheets saved in word 2010 are saved with the .xlsx extension.

How to open or run MS-Excel in computer

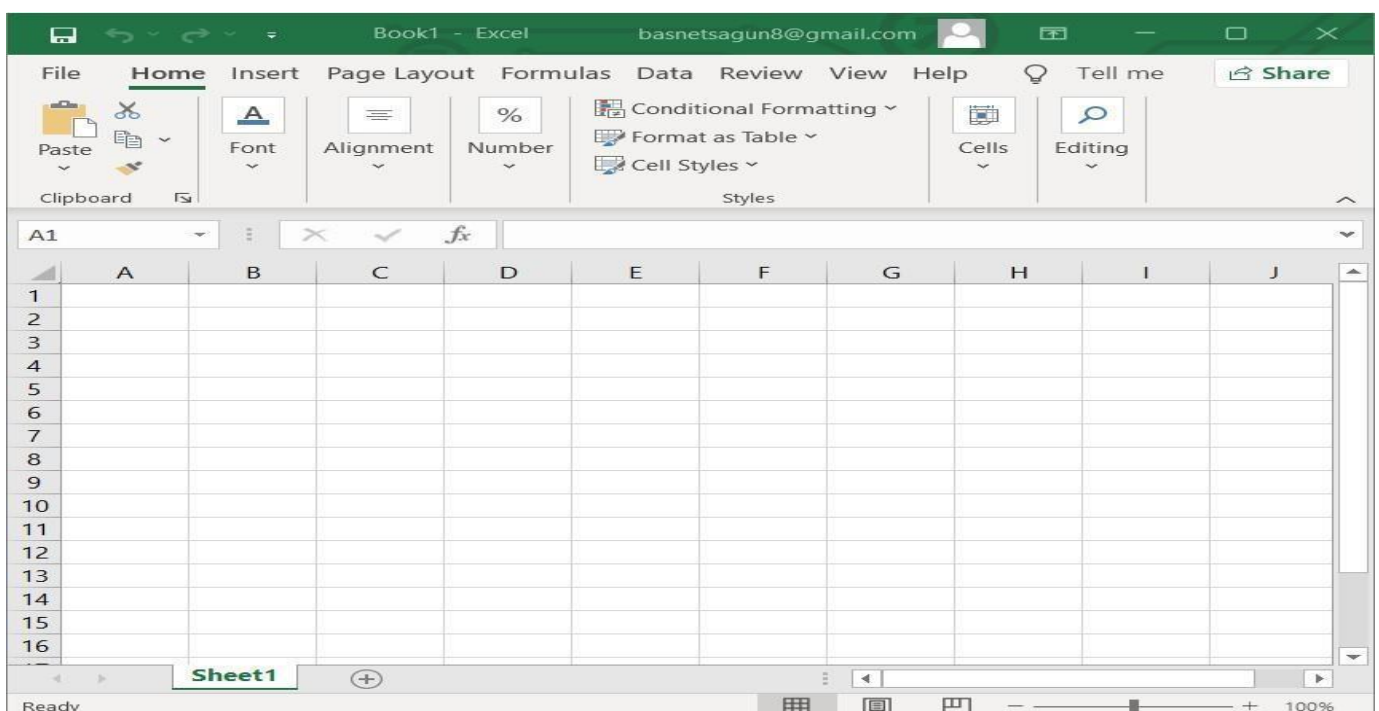
Step 1 – Click the button windows + R at the same time. Then the run option will pop out in screen

Step 2 – Write excel in open option in run file.

Step 3 – Press ok button and now MS-Excel will open.



Following is the basic window which you get when you start the excel application.



Pension Calculation in Ms-Excel

Steps

- First all the employee name,join date, salary cells are added.
- Respective value in each cell is added .
- In E2 formula for pension calculation is added .
- Formula = =IF (C2<=2002, D2*30%, IF (C2<=2000, D2*40%, 0))
- Finally the resulted output i.e pension amount is shown in the figure.

Pension Calculation .xlsx					
File Edit View Insert Format Data Tools Help Last e					
100% \$ % .0 .00 123 Default (Ca...					
E2 fx =IF(C2<=2002,D2*30%,IF(C2<=2000,D2*40%,0))					
	A	B	C	D	E
1	SN	Employee Name	Join Date	Salary	Pension Amount
2	1	Mahesh	1999	1322	396.6
3	2	Manish	2000	3222	966.6
4	3	Anish	2001	1233	369.9
5	4	Prasanga	2002	4333	1299.9
6	5	Awan	2003	2322	0
7	6	Sita	2004	4333	0
8					
9					

Bill Calculation Excel

Steps

-First all the name,current meter reading,Previous Meter reading,Consumed Unit,Bill Amount1,Bill Amount 2 cells are added .

-Respective value in each cell are filled .

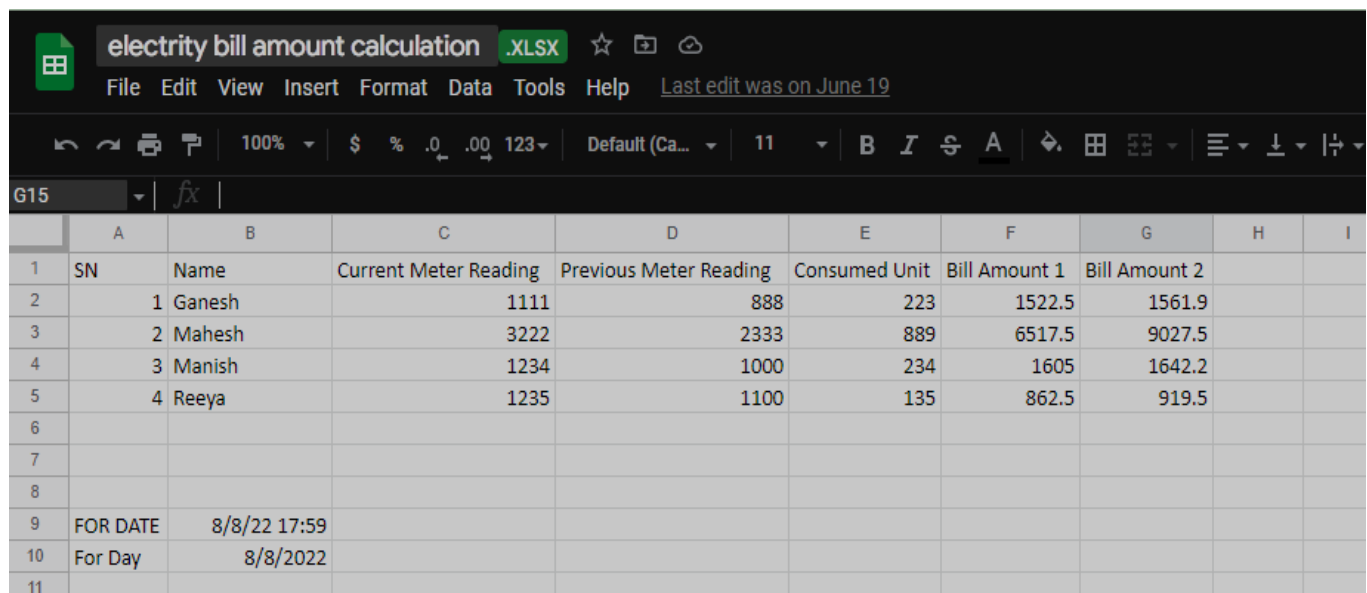
-For Bill Amount 1 , there is separate formula, and for Bill Amount 2 there is separate formula .

-In Bill Amount 1 , the formula : $=IF(E2 \leq 20, 80, (E2 - 20) * 7.5)$ is applied.

-In Bill Amount 2, the formula :

$=IF(E2 \leq 20, 80, IF(AND(E2 > 20, E2 \leq 250), 80 + (E2 - 20) * 7.3, IF(E2 > 250, (250 - 20) * 7.3 + (E2 - 250) * 11.5)))$ is applied.

-Finally,the outcome or the result of both the bill are shown in the figure.



SN	Name	Current Meter Reading	Previous Meter Reading	Consumed Unit	Bill Amount 1	Bill Amount 2
1	Ganesh	1111	888	223	1522.5	1561.9
2	Mahesh	3222	2333	889	6517.5	9027.5
3	Manish	1234	1000	234	1605	1642.2
4	Reeya	1235	1100	135	862.5	919.5
FOR DATE	8/8/22 17:59					
For Day	8/8/2022					

CountIf and SumIf Calculation In Excel

Steps

- First SN, Item Name, Qty(quantity),Rate and Amount cell are added in the Excel.
- Respective value are added in the respective cells.
- In E2 formula for amount, ie $=C2*D2$ is applied
- For countIf, formula : $=COUNTIF(B2:B8, "HDD")$ is applied.
- Similarly, For sumif, formula: $=SUMIF(B2:B8, "HDD", E2:E8)$ is applied.

	A	B	C	D	E	F	G	H	I	J
1	SN	Item Name	Qty	Rate	Amount					
2	1	HDD	4	120	480					
3	2	FDD	5	322	1610					
4	3	SDD	6	322	1932					
5	4	ZDD	7	433	3031					
6	5	VDD	8	544	4352					
7	6	HDD	3	5	15					
8	7	HGG	4	6	24					
9										

Interest Calculation In Excel

Steps

-First SN, Name,Loan,Loan date, payment date,year, month,day,interest Rate and interest Amount cells are made.

-Respective value are added in the respective cells.

-In year column, formula `=YEAR(E2-D2)-1900` is added.

-In Interest Amount, formula =C2* (F2+G2/12+H2/365) *I2 is added

-Finally , the result is displayed in the interest amount column for every person .

[illegible]

MS-DOS

Introduction to DOS

DOS Commands are instructions to perform tasks on files and directories very useful to Windows users. DOS commands are case insensitive. And as you already know, file is the area where we store group of information or data, and collection of groups of files is called a directory.

In MS-DOS the file name follows 8dot3 format and is divided into two parts – primary name and secondary name. Primary name is up to 8 character long and secondary name is up to 4 characters with dot. For example, in the file-name logo.jpg, Logo is the primary name and the .jpg is the secondary name. Secondary name is fixed for particular type of file, meaning for system files the secondary name is designated as .sys, for text files it is .txt and so on. To name a file or directory special character like <, / * | and space are not allowed.

- 1. From the level of the C:\Work directory create a directory labeled LAB, and then create two subdirectories labeled: LAB2A and LAB3A in the LAB directory.**

Ans:

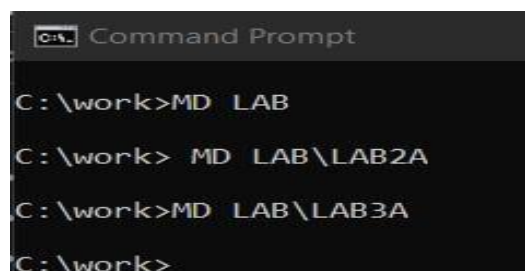
```
C:\Work>MD LAB↵C:\Work>MD LA
```

```
B\LAB2A↵
```

```
C:\Work>MD LAB\LAB3A↵
```

Or

```
C:\Work>MD LAB\LAB2A LAB\LAB3A↵
```

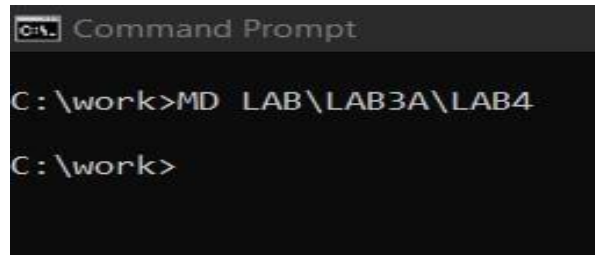


```
Command Prompt

C:\work>MD LAB
C:\work> MD LAB\LAB2A
C:\work>MD LAB\LAB3A
C:\work>
```

2. **In the LAB3A directory create a subdirectory labeled LAB**

Ans: C:\Work>MD LAB\LAB3A\LAB4↵



```
C:\work>MD LAB\LAB3A\LAB4
C:\work>
```

3. **In the LAB2A directory create files: file1.txt and write your first name and last name in this file, file2.txt and write the number of your index init.**

Ans:

C:\Work>CD LAB\LAB2A ↵

C:\Work\LAB\LAB2A>copy

y con file1.txt↵Jiwan

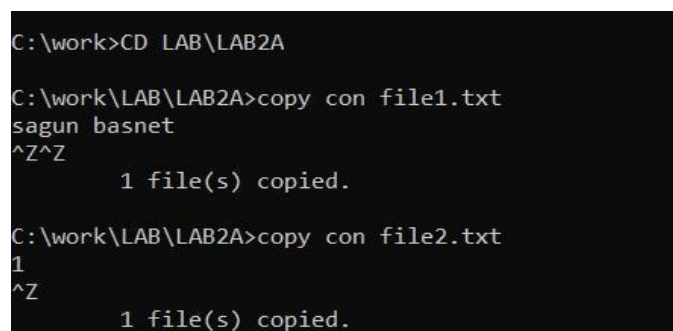
Khadka

^Z (Press F6)

C:\Work\LAB\LAB2A>copy y con file2.txt↵

1

^Z (Press F6)

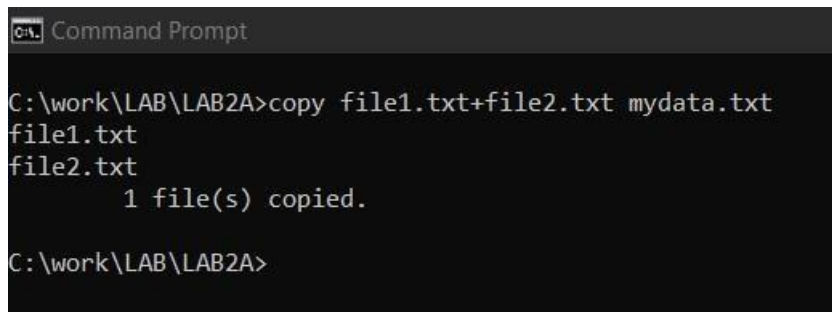


```
C:\work>CD LAB\LAB2A
C:\work\LAB\LAB2A>copy con file1.txt
sagun basnet
^Z^Z
1 file(s) copied.
C:\work\LAB\LAB2A>copy con file2.txt
1
^Z
1 file(s) copied.
```


4. Place a data from the files: file1.txt and file2.txt into mydata.txt file

Ans:

C:\Work\LAB\LAB2A>copy file1.txt+file2.txt mydata.txt↵



```
Command Prompt

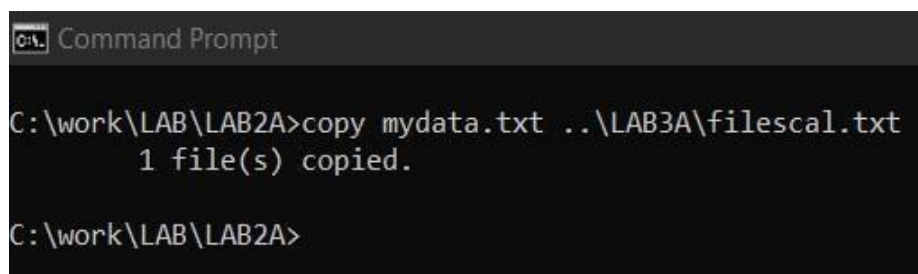
C:\work\LAB\LAB2A>copy file1.txt+file2.txt mydata.txt
file1.txt
file2.txt
        1 file(s) copied.

C:\work\LAB\LAB2A>
```

5.Copy the file mydata.txt to the LAB3 directory renaming it to filesca1.txt.

Ans:

C:\Work\LAB\LAB2A>copy mydata.txt ..\LAB3A\filesca1.txt↵



```
Command Prompt

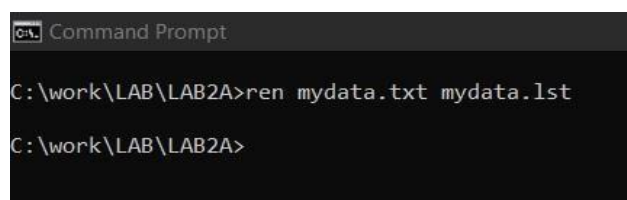
C:\work\LAB\LAB2A>copy mydata.txt ..\LAB3A\filesca1.txt
        1 file(s) copied.

C:\work\LAB\LAB2A>
```

6.Rename the file from mydata.txt to mydata.lst.

Ans:

C:\Work\LAB\LAB2A>ren mydata.txt mydata.lst↵



```
Command Prompt

C:\work\LAB\LAB2A>ren mydata.txt mydata.lst

C:\work\LAB\LAB2A>
```

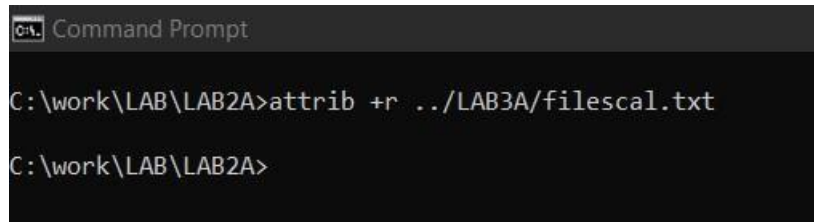
7. Enable the "read only" attribute for the file filescal.txt.

Ans:

C:\Work\LAB\LAB2A>attrib +r ../LAB3A/filescal.txt

Or

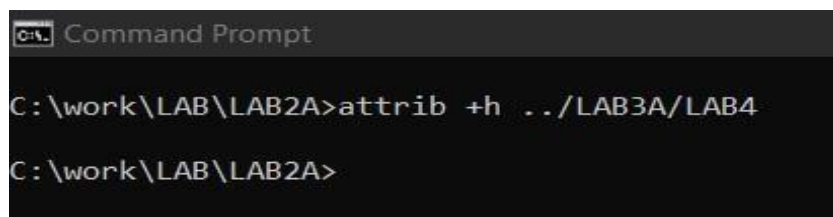
C:\WORK\LAB\LAB3A>attrib +r filescal.txt



```
Command Prompt
C:\work\LAB\LAB2A>attrib +r ../LAB3A/filescal.txt
C:\work\LAB\LAB2A>
```

8.Enable the "hidden" attribute for LAB4 directory.

Ans:C:\WORK\LAB\LAB2A>attrib +h ../LAB3A/LAB4

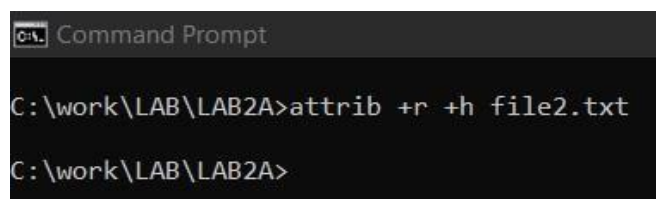


```
Command Prompt
C:\work\LAB\LAB2A>attrib +h ../LAB3A/LAB4
C:\work\LAB\LAB2A>
```

9.Enable the "read only" and "hidden" attribute for the file file

Ans:

C:\Work\LAB\LAB2A>attrib +r +h file2.txt



```
Command Prompt
C:\work\LAB\LAB2A>attrib +r +h file2.txt
C:\work\LAB\LAB2A>
```

A. Create a directory: C:\WORK\LABOR

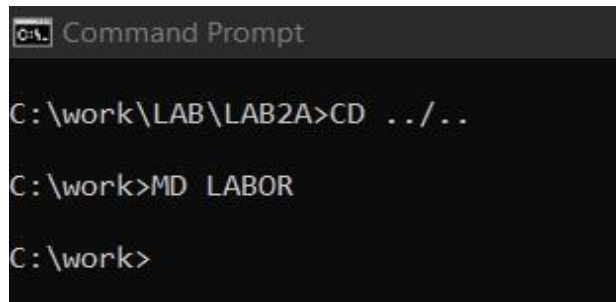
Ans:

C:\Work\LAB\LAB2A>CD ../.. ↵

C:\Work>MD LABOR↵Or

C:\Work\LAB\LAB2A>MD ../..\LABOR

Or C:\Work\LAB\LAB2A>MD C:\WORK\ABC



```
Command Prompt
C:\work\LAB\LAB2A>CD ../..
C:\work>MD LABOR
C:\work>
```

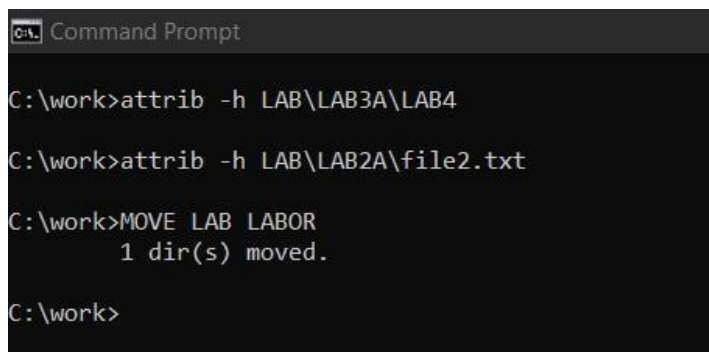
B. Move the structure from the LAB directory to the LABOR directory, remember about the hidden files and directories and the empty directory.

Ans:

C:\Work>attrib -h LAB\LAB3A\LAB4↵

C:\Work>attrib -h LAB\LAB2A\file2.txt↵

C:\Work>MOVE LAB LABOR↵



```
Command Prompt
C:\work>attrib -h LAB\LAB3A\LAB4
C:\work>attrib -h LAB\LAB2A\file2.txt
C:\work>MOVE LAB LABOR
           1 dir(s) moved.
C:\work>
```

C. Place the information about the structure of the C:\WORK directory in the file inflab.txt, and the information about the attributes of this structure in the file infolab2.txt

Ans:

```
C:\Work>tree /f /a>inflab.txt↵
```

```
C:\Work>attrib>infolab2.txt↵
```

```
Command Prompt

C:\work>tree /f /a>inflab.txt
C:\work>attrib>infolab2.txt
C:\work>type inflab.txt
Folder PATH listing for volume OS
Volume serial number is 3223-1AEC
C:.
|   inflab.txt
|
\---LABOR
    \---LAB
        +---LAB2A
        |       file1.txt
        |       file2.txt
        |       mydata.lst
        |
        \---LAB3A
            |   filesca1.txt
            |
            \---LAB4

C:\work>type infolab2.txt
A                               C:\work\inflab.txt
A                               C:\work\infolab2.txt

C:\work>
```

D.Delete the tree of the C:\WORK\LAB directory.

Ans:

```
C:\Work>RD LABOR\LAB /S /Q
```

```
Command Prompt

C:\work>RD LABOR\LAB /S /Q

C:\work>tree LABOR
Folder PATH listing for volume OS
Volume serial number is 3223-1AEC
C:\WORK\LABOR
No subfolders exist

C:\work>
```

MS_Powerpoint

Introduction to MS-Powerpoint

Ms-Powerpoint is a presentation software that helps us to create combination of various slides depicting a graphical and visual interpretation of data, to present information in a more crative and interactive manner. By default, presentations saved in powerpoint 2016 are saved with .pptx extension.

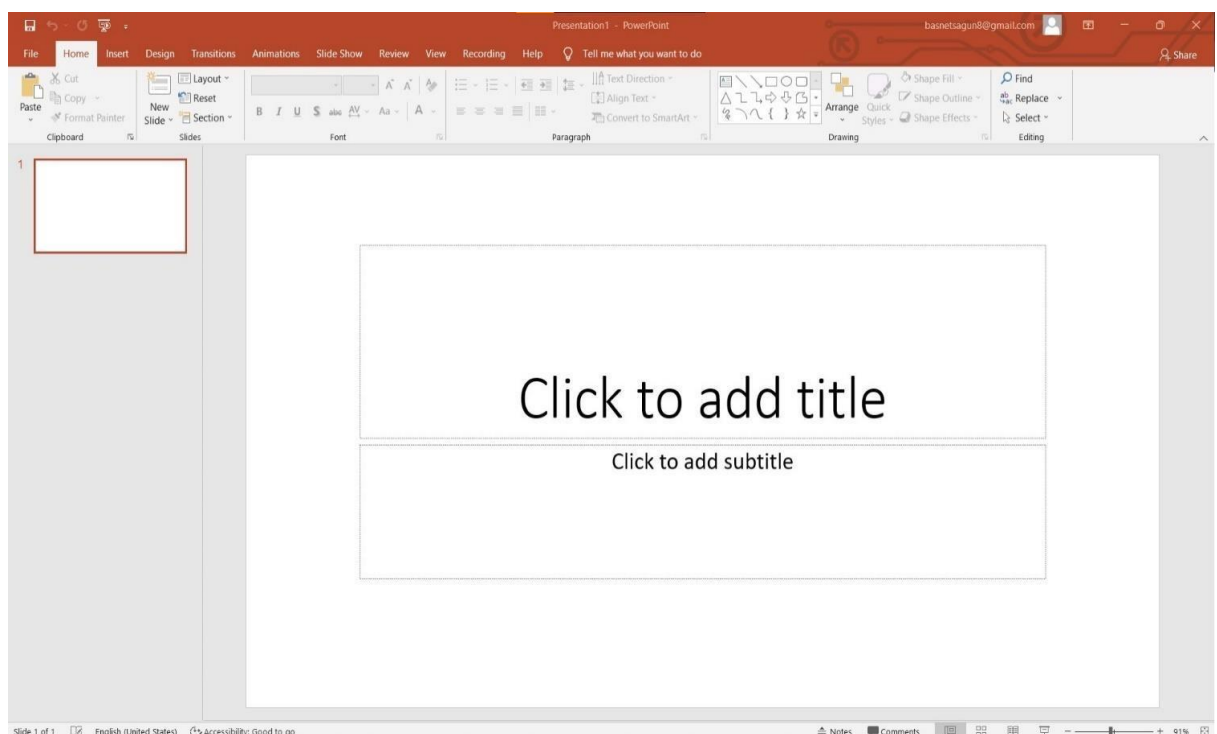
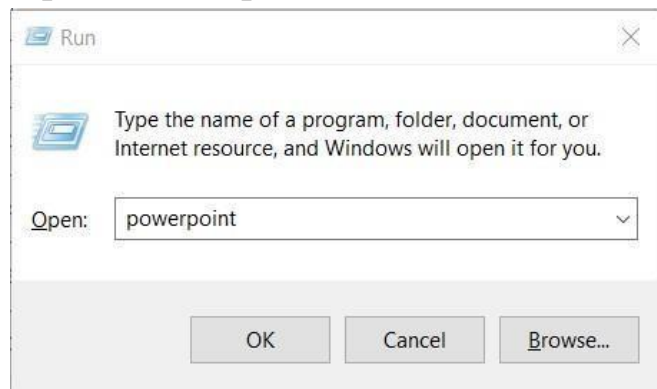
How to open or run MS-Powerpoint in computer

Step I: - Click the button window + R at the same time. Then the run option will pop out in screen.

Step II: - Write powerpoint in open option in run file.

Step III: - Press ok button and now MS-Powe--rpoint application will open.

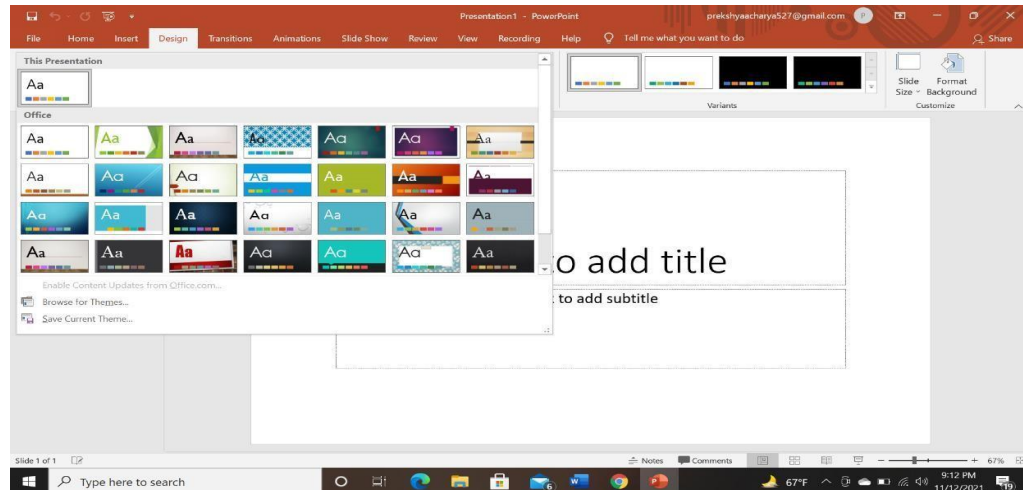
Following is the basic window which you get when you start the powerpoint application.



Features

1. SlideDesign

MS-Powerpoint has various themes using which background color and designs or texture can be added to the slide. This makes the presentation more colorful.

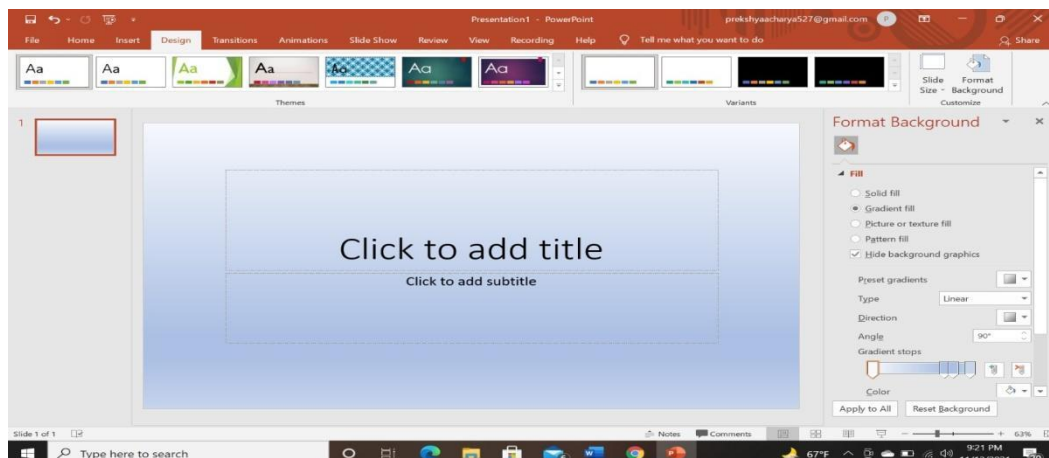


2. SlideBackground

As powerpoint is a design based program, background are effective way of improving goodwill of slides. The themes in powerpoint help select the background by default, so everytime you change the theme, the default background is set automatically.

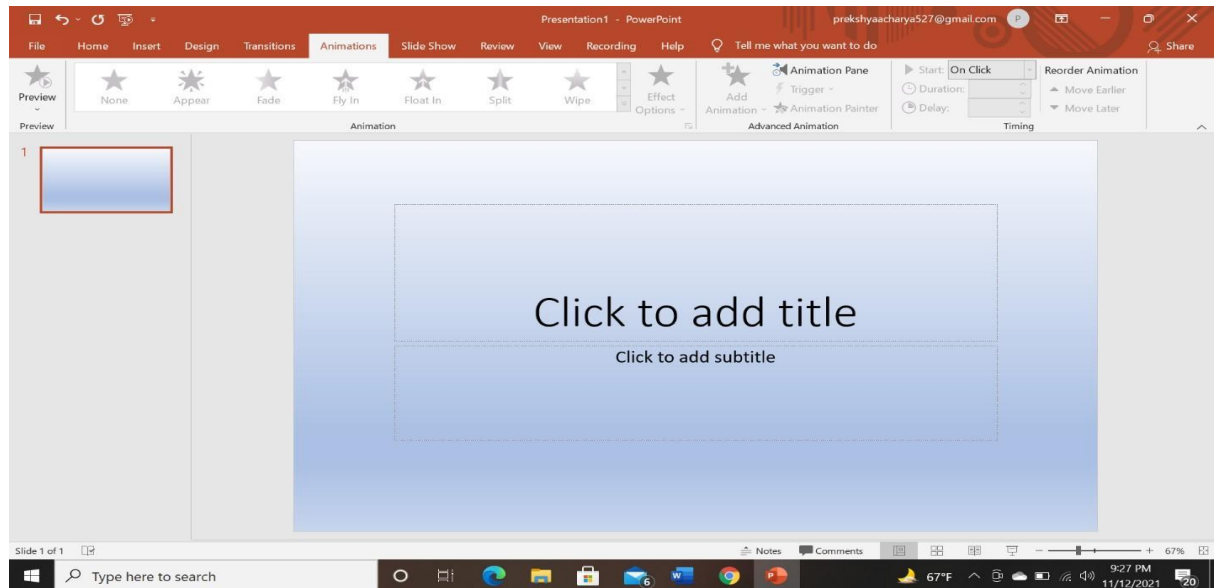
Theme includes more than just backgrounds, so you can retain other aspects of the theme while changing the default background.

The image below shows the background slide which are available for use;



3. Animation

Powerpoint offers animation support which can be used effectively to add some motion in a monotonous presentation and make it more interesting. Animation can be applied to any object on the slide and the motion can be automated, time or trigger.



4. Transition

PowerPoint supports slide transition feature which allows you to specify how should the slides transition during the slide show.

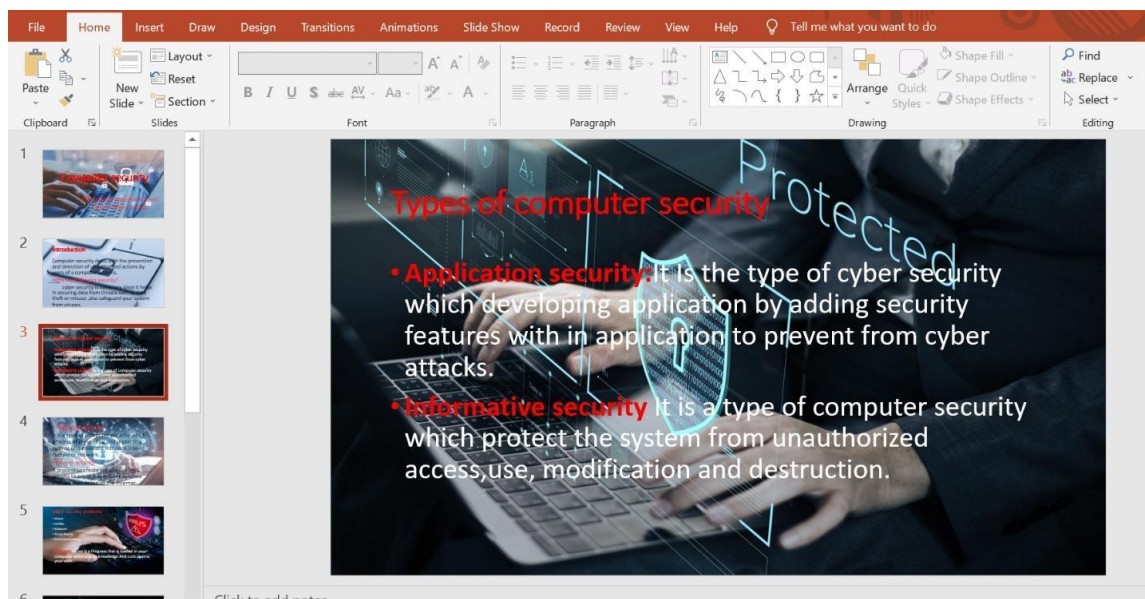
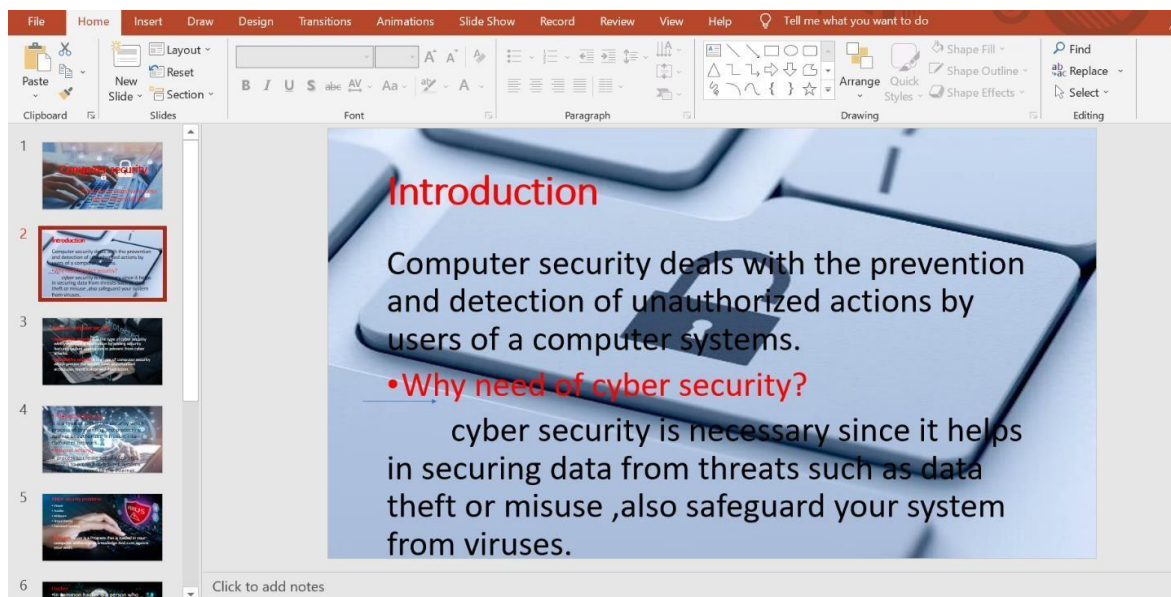
Given below are the steps to add and preview slide transitions.

- Select the slide to which you want to apply the transition.
- Go to the transition scheme the Transitions ribbon.
- Select one of the transition schemes from the list available.

Powerpoint will instantly show you a preview of the scheme. If you are not satisfied, you can pick an alternate scheme. The last selected scheme will apply to the slide.


- You can change the effects on the selected transition scheme from the Effect option menu. Every scheme has a unique set of effect options.
- You can also modify the transition timing setting from the Timing section.


Presentation Examples:





File Home Insert Draw Design Transitions Animations Slide Show Record Review View Help Tell me what you want to do


Paste Paste > New Slide Layout Reset Section Clipboard Slides Font Paragraph Drawing Editing Find Replace Select

1 

2 

3 

4 

5 

- **Network Security**
It is a type of computer security which process of preventing and protecting against unauthorized intrusion into computer network.
- **Internet security**
A process to create set of rules and actions to protect computer systems that are connected to the internet.

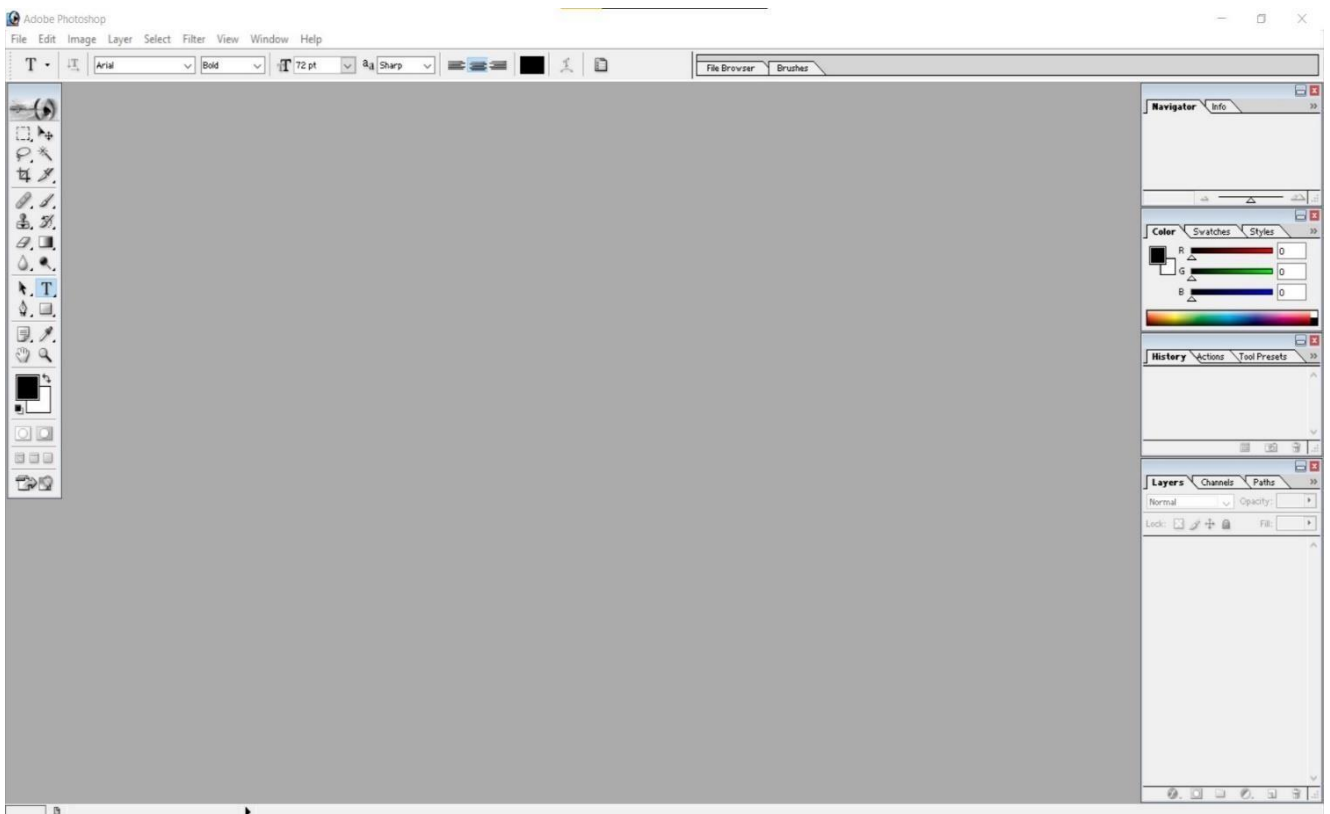
Adobe Photoshop

Introduction to Photoshop

Adobe Photoshop is a graphics editing software, or image editing software, that allows you to create and manipulate visual images on the computer. Editing features in the program help in creating managing for Internet, print, and other new media disciplines.

Workspace in Photoshop

Photoshop lays out the most important tools that you will need right on the main workspace. This allows you to easily find the tools that you need without digging through menus. Furthermore, Photoshop allows user to use simple keyboard shortcuts in order to get to these tools faster.



Tool Bar

It provides access to a variety of tools with multiple image-editing functions. These tools typically fall under the categories of drawing; measuring and navigation; selection; typing; and retouching. Some tools contain a small triangle in the bottom right corner of the tool icon; these can be expanded to reveal similar tools.

Options Bar

Works in coordination menus for performing common tasks. It consists of eleven menu options: File; Edit; Image; Layer; Type; Select; Filter; 3D; View; Window; Help. Menu items containing an ellipsis indicate that a dialogue box will follow that option. Menu items with an arrow indicate a submenu for that particular option.

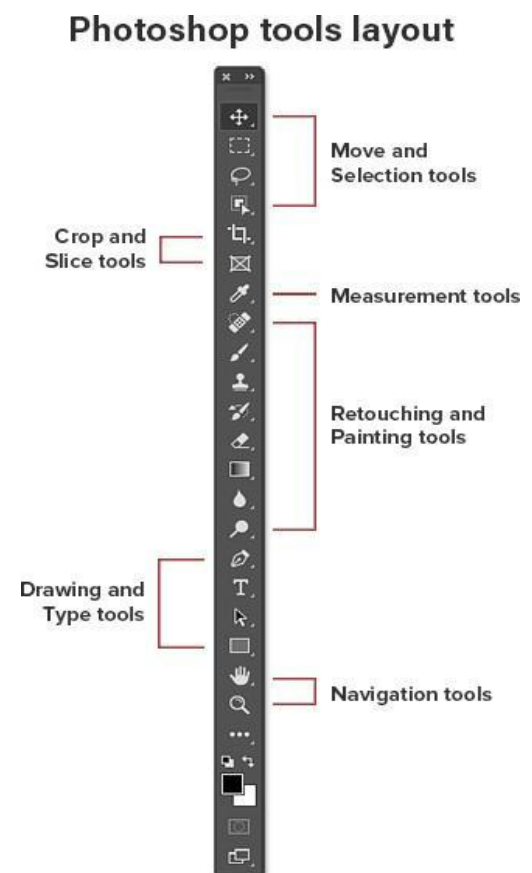
Panels/palettes

It helps you monitor and modify your work. It provides groups of functionality specific to certain tools or tasks. You can create a custom workspace by moving and manipulating panels.

The tools layout

Let's look at how Photoshop's toolbar is organized. While it may seem like the tools are listed randomly, there's actually a logical order to it, with related tools grouped together.

At the top, we have Photoshop's Move and selection tools. And directly below them are the crop and slice tools. Below that are the measurement tools, followed by Photoshop's many Retouching and Painting tools.



Designing simple cover page of copy

Steps:

- Open photoshop in your computer.
- From rectangle tool make a rectangle and colored it green
- From text tool write a content as shown in below figure. And add an image.
- Here your cover page is ready save it and its complet...

