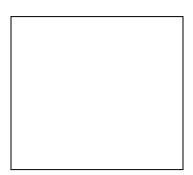
Lesson 1 Input Output Device

Related Topic form the lesson

- Introduction
- Data Storage Media
 - Primary Memory
 - Secondary Memory

- Input Device
- Output device



Hello children!

Input, Processing and Output are the three operations, that a computer system preforms. These operations are possible only when certain devices are attached to the computer.

The input and output devices attached to a computer are called computer peripherals.

INPUT DEVICES

The device that accept input from the user and convert it to a signal that can be understood by the computer are called input device.

A number of input devices are used in computers. Some input devices are used to enter data directly into the computer. However, there are input devices that are called pointing devices. These devices help you to select something on the screen directly by simply pointing towards it.

A large of input devices are available but the most commonly used input devices are keyboard and mouse. Let's learn about them.

Keyboard

It is the most common input device. A keyboard is connected with the main system through a cable. It is used to input data, manually by typing. It has the same arrangement of alphabetical keys as in a typewriter, therefore called QWERTY keyboard.

The keyboard has following types of keys:

- ➤ Alphabetic Keys (A-Z)
- ➤ Number Keys (0-9)
- ➤ Function Keys (F1- F12)



Fig 1.1 Keyboard

- Control Keys (Ctrl, Shift, Alt, Window, Esc, Enter)
- \triangleright Arrow Keys $(\rightarrow, \leftarrow, \uparrow, \downarrow)$
- ➤ Lock Keys (Caps Lock, Num Lock, Scroll Lock).

Mouse

It is a pointing device which is used to control the movement of a mouse pointer on the screen. It is used to make selections on the screen and to draw diagrams. A mouse may have two or three buttons.

Although a mouse will work on the flat surface of a table also, yet it is better to move the mouse on a mouse pad. Instead of sending characters, it sends the co-ordinates of the point on the screen, on which cursor is placed.

Light Pen

A light pen is a pointing device shaped like a pen and connected to a monitor. A light pen consists of a photocell mounted on a pen-shaped tube and is capable of sensing position on the screen when its tip touches the screen.

Joy stick

Joystick is an input device. It is specially used in video games and sometimes in CAD/CAM applications. It has a lever and two buttons (called trigger). The lever moves in all directions and controls the movement of a pointer.

Webcam

It is also an input device connected to computer. It captures still images and motion videos and displays it on the computer screen. If you are connected to internet. It allows other people to see you while you talk with them. In other words, it is an important device used in video conferencing.

Graphic Tablet

It is an input device using which one can draw graphic, similar to the way one draws images with a pencil and paper. It consists of a flat

Fig 1.2 Mouse





Fig 1.3 Light Pen



Fig 1.4 Joystick



Fig 1.5 Webcam



Fig 1.6 Graphic tablet

surface upon which the user may 'draw' an image using an attached pen called stylus. The image is displayed on the computer monitor.

OUTPUT DEVICES

Output devices are used to get result or information from the computer system. These devices convey information form the computer to the user. Some common output devices are monitor. Printer, Plotter etc.

Monitor

Monitor is the common output device that is used with the computer. It is also known as Visual Display Unit (VDU). The monitor has a screen which displays the output. The output displayed by monitor is known as the soft copy output. The monitor also displays the software which are loaded in the computer.

1. Impact printers: Impact printers are the kind of

TECH FACT

The screen is treated as an array of tiny dots called **Pixels.**



Fig 1.7 Monitor

Printer

Printer is an output device that is used for printing the output on paper. The output given or printed on paper is called a hard copy output. A printer can print in black or any colour depending on the features available in it.

Through the printer are available in various shapes and sizes, they fall ion the following two broad categories:

- 1. Impact printers
- 2. Non-impact printer
- printers which print by striking or making impact with their print head. The print head of an impact printer stokes the printer ribbon to create a mark on the paper just like a typewriter. Impact printers are slow, noisy and inexpensive but the quality of print is poor. Example of impact printers are the dot-matrix printer and the daisy wheel printer.
- 2. Non-impact printer: Non-impact printers are the kind of printers which do not print by striking their print head against the paper or some others medium. There is no direct contact between the printer head and the paper. Inkjet printer and laser printer are the most commonly used non-impact printers. These printers are faster,

noiseless and the quality of printing is much superior. However, they are much more expensive then the impact printers.

- a. <u>Inkjet printer:</u> In an inkjet printer, the print has tiny nozzles which spray ink at great speed on sheets of paper. These printers are economical to purchase and use.
- b. Laser printer: A laser printer prints by fixing a special kind of ink called toner to the printing drum. Laser printers are faster and produce high quality prints. They are much more expensive than inkjet printers.



Fig 1.10 Laser Printer

Plotter

A plotter is an output device that is used for creating high-quality graphics, visuals, charts, graphs, tables or diagrams. Plotters use ink pens or jets of ink to create graphics on paper or polyester film. Plotters are slow devices, but the graphics they produce are of very good quality. Plotters are mainly used by the engineers, architects and seismologist. It is also help helpful in Computer Aided Design (CAD).



Fig 1.11 Plotter Printer

DATA STORAGE MEDIA

A computer has a very larger internal memory. It can store a vast amount of information and can recall that information instantly and correctly whenever desired. The memory of a computer can be classified into primary memory and secondary memory.

Primary Memory

This memory is also called known as Main Memory. Primary memory is used as a form of temporary memory for calculation processes and storage of temporary values that need rapid access or updating. The contents of the primary memory disappear when the power is turned off. Primary memory is important while executing programmes. Bigger programmes require more primary memory. Primary memory can be classified into two types:

- 1. Random Access Memory (RAM)
- 2. Read Only Memory (ROM)

1. Random Access Memory (RAM)

- ⇒ The CPU used this memory while processing information.
- ⇒ This is also called read/write memory.
- ⇒ This memory is temporary in nature.

2. Read Only Memory (ROM)

- ⇒ ROM contains a basic set of instructions called the Basic Input-output system which helps to start the operating system.
- ⇒ It is a memory unit that can only be read from.
- ⇒ It is a permanent memory.



Fig 1.12 RAM



Fig 1.12 ROM

Secondary Memory

This memory is also called auxiliary memory or back-up memory. Secondary memory is used for the storage of most of the system's data, programmes and all other permanent data that should stay there even the power is turned off. As a computer is fed with bigger, smarter programmes and more data. It would naturally need more secondary memory to hold them.

Secondary memory includes Floppy Disk, Hard Disk, Magnetic Tape, Magnetic Optical Disk Compact Disk and Pen Drive etc.

Hard Disk

A hard disk is a storage medium of high capacity fixed memory which is permanently fixed inside the CPU box. It cannot be taken out and put inside the another computer easily. It uses similar concept and working as that of a floppy disk, but has much larger storage space then a floppy disk. It has a higher access speed.

A Hard Disk consists of platters with a magnetic surface, fixed one above the other through a spindle to make up a Fig 1.13 Hard Disk disk pack. Like the floppy disk, the surface of this disk is also magnetized. This pack of disk is not removed from its drive. These days, hard disks with capacities like 160 GB, 320 GB, 500 GB and above are available in the market.

Floppy Disk

A floppy disk is a flexible plastic disk which is coated with magnetic material and covered by a protective jacket. It is used to store data magnetically. The floppy disk is also called diskette. Disk Drive for floppy disk are called floppy drives which are

Fig 1.14 Floppy Disk

provided by almost all systems. However, these disks are not in use nowadays, floppy disks are slower to access then hard disks and have less storage capacity.

Compact Disk (CD)

Lesson 2 Evolution of Computers

Related Topic form the lesson

	Introc	duction
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- Elements of Microsoft Word
- Formatting Word Document
- Using Spell Check

- Working with Notepad
- Starting MS Word
- Inserting Bullets and Number
- Working with Word Processing 2013

Hello children!

In this chapter, you will be able to learn about classification of computer language, Translators and some high level languages. Languages is a medium to express our views and feelings either verbally or symbolically. All human being requires a language to communicate with a computer. There are different computer languages for different purpose. For every action, a computer has

to be given instructions accordingly. A programme is a set of instructions which tells the computer what to do:

The process of writing specific instructions in a computer language is called programming.

The people who do this job are called "programmers".

CLASSIFICATION OF COMPUTER LANGUAGES

The computer Languages can be classified into four categories:-

- ➤ Machine Language
- Assembly Language
- ➤ High-Level Language
- Fourth-Generation Language

Machine Language

Machine language is used in computers and contains digits 0 and 1 only. It is the only language that a computer understands. It is expressed in binary form i.e. '0' and '1'. 0 means 'Off' state and 1 means 'on' state. All instructions are made up of combinations of 0 and 1 only. This is quite difficult

Do you know?

Machine language is also called the first generation language.

> Windows Media Center Windows Media Player Window Movie Maker 2.6

> > Step 3

XPS Viewer

Accessories Adobe

ASIO4ALL v2

Image-Line

Audio Related Progra Chrome Apps

CorelDRAW Graphics Suite 12 CyberLink YouCam Games

for operators to learn and understand. This language in extremely machine dependent. It has the advantage of very high speed and very low memory utilization. A machine language program written on one computer may or may not work on other computer. This is the reason why machine language is also regarded as a Low Level Language (LLL).

Assembly Language

In this language'Mnemonic Codes'and 'Symbolic Addresses' are used in place

of 0's and 1's.

(page 11)Starting Windows Media Players

Step 1: Click on Start button

Step 2: Click on All Programmes.

Step 3: Click on Windows Media Player.

Players Library

 In the Player Library, we are may access and organize our digital media collection. Within the navigation pane, we may chose a category, like Music, Videos or Pictures, to view in the details pane. For instance, to view all of our music organized by Genre, double-click Music and then click Genre.

As we move between the different views in the Player Library, we may use the Black and Forward buttons in the upper-left corner of the Player.

Google Chrome

Notepad

Microsoft PowerPoint 2010

Protegent Total Security

Step 2

 Now Playing Mode: In this mode, we view DVDs and videos or view the music that is presently playing.

To play a music file in the Player Library

- 1. In the Player Library, search or browse for the item that we wish to play.
- 2. To play a file in the Player Library, double-click the item to begin playing it.
- We may also drag individual items (like one or more songs) or collections of items (like one or more albums, genres, artists, years, or ratings)

Do you know?

Never change the setting of your computer unnecessary. If you required, do it in the presence of someone or your teacher who has a good command over computer.

to the list pane. If we drag a collection of items to the list pane, the first item in the will start playing.

(page 13) WORKING WITH WINDOWS

Minimize, Restore and Close windows

We use the Minimize button to minimize a window. When we minimize a window. It looks like a button on the Taskbar. A minimized button may be restored by clicking its preview on the Taskbar.

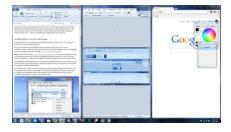
We may also minimize a window by pressing **Windows logo key + Down Arrow key**. Restore the window by pressing Window by pressing **Windows Logo key + Up Arrow.**

WORKING WITH MULTIPLE WINDOWS

We may use the Taskbar to open and work with multiple windows simultaneously. This is a very useful characteristics particularly at the time of copying or moving files. To do this: Right –click on the Taskbar to view the Taskbar menu.



Fig 2.5 Cascade Windows



Show Windows side by side



Show desktop

Shutting Down Our Computer

Turning off our computer properly

When we're finished using our computer, it's significant to turn it off nicely, not to save energy, but also to assist keep our computer more secure and to make sure that our data is saved.

Use the Shutdown button on the start menu
 To turn off your computer, use the Start menu, click the
 Start button and then, in the lower-right corner of the
 Start menu, click Shut Down.

When we click Shut down, our computer closes all open programme, along with windows itself and then totally turns off our computer and display shutting down. Shutting down doesn't save our work, so we should save our files first.

Click the arrow next to the Shut Down button for more options:

(Click Restart if wish your computer to restart after shutting down.

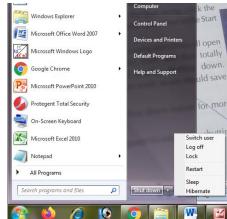




Fig 2.5 Steps to Shut Down

Lesson 3 More About MS Word 2013

(page 18)Related Topic form the lesson

- Introduction
- ♦ Insert Hyperlink
- Line Spacing
- Merging the mail

- To find and replace text
- Drop Cap
- Page margin

Hello children!

In this chapter you will be able to learn more about MS-Word 2013, i.e. its introduction to find and replace text, to search with the Microsoft Office help button to insert hyperlinks in a document to apply drop cap to apply column formatting to set line spacing, paragraph spacing, page orientation, page margin and page

merging.

INTRODUCTION

Microsoft Word 2013 is called as an application software and a part of MS Office package. It is known as a full featured word processing programme that allows us to create documents like brochures, report, letters, Newsletters and web pages.

You have already learnt about various editing and formatting commands arranged in different groups under each Tab on the Ribbon.

Let us have a glimpse at the Home tab, insert tab and Page Layout tab.

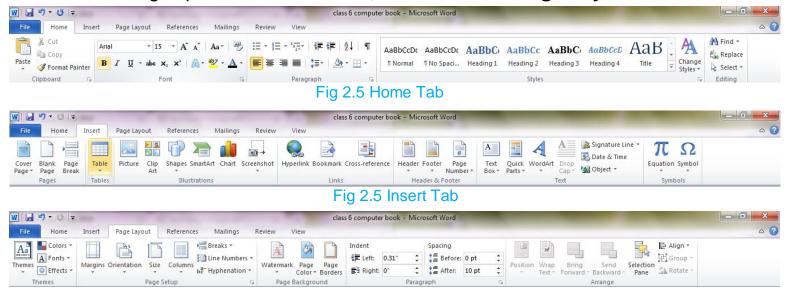


Fig 2.5 Page layout Tab

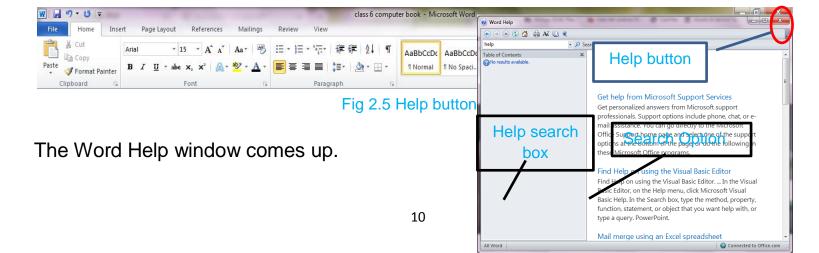
TO FIND AND REPLACE TEXT

Many times you may need to find some particular text in a large document. Sometimes you may require to replace a particular text with some other text. Our friendly MS Word provide and good solution for us through **Find and Replace** commands.

(page 20 & 21)

TO SEARCH WITH MICROSOFT OFFICE HELP BUTTON

If you could not know how to use any word feature, you can simply click the Microsoft Office help button at the right corner on the Ribbon.



Write your query in the Help Search box and click Search button in the Search button. You see several search results for your result. Every entry is a link to further information.

For instance, if you type 'Clip Art' in the Help Sear Result Result Result results as shown in the picture.

You may close the help window by clicking the close button.

TO INSERT HYPERLINKS IN A DOCUMENT

You have listened about **hyperlink** in your previous class. Hyperlinks assist you to move instantly from one page to another page by just clicking a link. The links can be in the form of text or picture. The mouse usually takes the shape of a hand over a hyperlink. The target may be a web page, a picture or another file.

To insert a hyperlink, follow the given steps below:

Step 1: Select the text on which hyperlinlk needs to be inserted.

Step 2: Click the insert tab on the Ribbon.

Step 3: Click Hyperlink form Link group.

Step 4: The Insert Hyperlink dialog box comes up with many options, through which you can create a link. For instance, if you click the option Web Page & Existing File a list comes up.

Step 5: Write the address of the website in the Address box or click any exiting file from the list to create a link to the file. Here, the website address 'www.xyz.com' is typed.

Step 6: Click on OK button. This insert a hyperlink in your document.

TO USE THE HYPERLINK

Hyperlink assists you to move instantly from the present document to linked page. This process of moving form one document ot a web page or from one document to the other is known as **following the link.**

Fig 2.5 Help result

Do you know?

We see Microsoft Office 2010 help button on the Ribbon corner in all Microsoft applications.

TECH FACT

Press F1 button for more help option

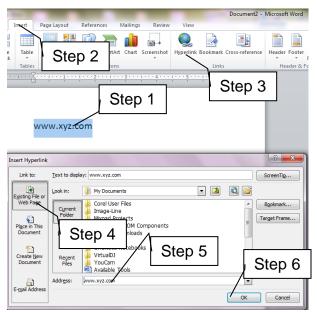


Fig 2.5 Steps to Link Document

TECH FACT

Ctrl + K = Create a link to a web page, a picture or program.

TO APPLY DROP CAP

Have you ever notices a big capital letter at starting of a paragrpah in a newspaper or

magazine? Drop Cap is a feature in MS Word which lets you create a big dropped intial capital letter.

(page 23)

TO SET LINE SPACING

Line spacing signifies to the amount of vertical space between the line of text in a paragraph. To set line spacing. Follow the given steps:

Step 1: Select the Paragraph for which yo desire to set the line spacing.

Step 2: Click the home tab.

Step 3: Click Line Spacing from Paragraph group and select the needed number of sapcing form the list to adjust the space between lines.

TO SET PARAGRAPH SPACING

Paragraph spacing signifies to the amount of space below or above a paragraph.

To set paragrpah spacing, follow the given steps:

Step 1: Click anywhere in the paragraph to set apacing after or before it.

Step 2: Click Page Layout tab ion the Ribbon.

Step 3: Click the arrow next to Spacing Before or Spacing After form Paragraph group to increase or decrease the amount of space you desire.

TO SET PAGE ORIENTATION

Orientation signifies the layout position of the paper for printing. There are two methods ot set orientation of a page in a MS Word document: Landsacpe and Portrait.

Do you know?

You can also insert a picture and create a hyperlink on the picture with the help of same process

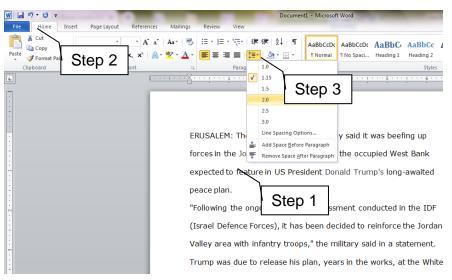
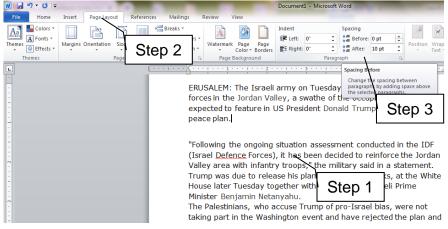


Fig 2.5 Steps to set line spacing



To set page orintation, follow the given steps:

Step 1: Click on Page Layout tab in the ribbon below. Fig 2.5 Steps to set paragraph spacing

Step 2: Click on Orientation from the Page Setup group and select the type of orentation as Landscape or Portrait.

Click the Close button.

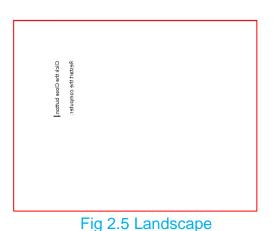


Fig 2.5 Steps to set page orientation

Fig 2.5 portrait

TO SET PAGE MARGIN

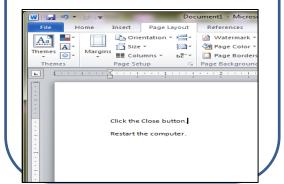
Page margin signifies to the blank space around the edges of the page. This space seen on the four side of the page is known as top margin, left margin, bottom margin and right margin. All the texts and images are inserted inside the margin.

To set margins, follow the given steps:

Step 1: Click on the page Layout tab.

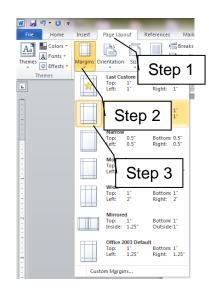
TECH FACT

Click view ruler button at the top of the vertical scroll bar is for the purpose to hide or show the vertical and horizontal rulers.



Step 2: Click on Margins from page setup.

Step 3: Select the margin type and click on it to use it to your page.



MERGING THE MAIL

Imagine that you desire it give a party to your relatives and friends. You have typed the invitation letter. Now, you have to write all the address of your relatives and friends. Writing all the name and addresses and then crating the documents and

saving them is a tiring job. This work is done very easy in MS Word applying the Mail Marge features. By using marge features, you can send the same letter to a number of people.

The main marge process needs the following:

Main Document: The document that has text or letter which is to be dispatched is known as the main document.

<u>Data Source</u>: The file where all the addresses of the recipients are kept is known as Data Source.

The process of combining the Main Document with the Data Source is known as **Merging.** The final document is said to be the **merged Document.**

In general, the Mail Merge process covers the following three steps:

- > To create main document.
- > To create data source.
- To merge main document and data source.

TO MAIL MERGE

Follow the given steps below:

- Step 1: Click on the Mailing tab on the Ribbon.
- Step 2: Click on Start Mail Merge from the start Mail Merge group and select Letters form the selections available.
- Step 3: Type the letter you want to dispatch.
- Step 4: Click Select Recipients and Select Type
 New List option form the selections
 available. The New Address List dialog box
 comes up.
- Step 5: Fill in the different fields with suitable information. You can also have a blank field.
- Step 6: To create another entry, click the New Entry button.

You can arrange the records according to your need by clicking the suitable column heading. For instance, click First Name field to arrange according to names.

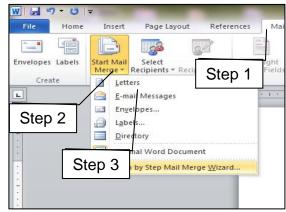
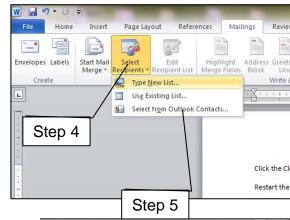
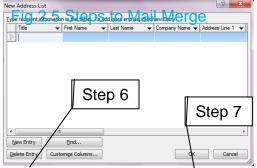


Fig 2.5 Steps to Mail Merge





- Step 7: After finishing the form, click OK button. The Save Address List dialog box comes up.
- Step 8: Give an appropriate name to the list and click Save button.
- Step 9: Now, put the cursor in the main document where you desire the fields to inserted.

Step 10: Click Insert Merge Field form write and Insert fields group and choose the needed field. Again, put the cursor at next place for next field

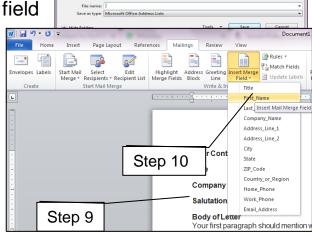
and insert the field in the same way.

You may also click Highlight Merge fields to easily recognize which part of the document will be replaced by the information form the recipients list.

Step 11: Click on Finish and Merge form Finish group to complete the mail merge process.

Step 12: Select Edit individual Documents. You get a dialog box.

Step 13: Select All option and click OK.



Step 8

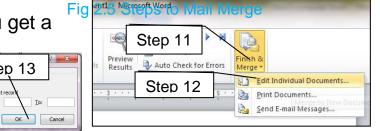


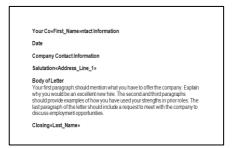
Fig 2.5 Steps to Mail Merge

The merged letters will be opened for further editing in MS Word 2013 windows.





Step 13



Quick Review

- This process of moving form one document ot a web page or from one document to the other is known as following the link.
- The process of combining the Main Document with the Data Source is known as Merging.

*	Line spacing	signifies 1	to the	amount	of vertical	space	between	the line	of to	ext ir	ı a
	paragraph.										

᠅ \	IS Wo	d provide a	and good	solution for	us through	Find and Re	eplace commands
------------	--------------	-------------	----------	--------------	------------	-------------	-----------------

Exercise

A. ⁻	Γick ☑ the c	orrect option for	m the follow	ving:			
	1. The mous	se usually takes t	the shape o	of a	over a	hyperlink.	
	a. Head		b. Leg		c. H	land	
2	2. Hyperlink	option is found i	n	tab.			
	a. Page la	ayout	b. Home		c. Ir	nsert	
3	3. Mail merg	jing process cov	ers	steps.			
	a. Three		b. Five		c. F	our	
2	4. Microsoft	Office help butto	n is preser	nt on the			
	a. Status	bar	b. Title ba	ar	c. R	Ribbon	
Ę	5. By defaul	t on MS Office, I	Line spacir	ig are			
	a. 1.5		b. 0.5		c. 2	.0	
B. F	Fill in the bla	anks in the given	sentence:				
	Hint	Esc to, Next to,	Soarch	Duplicato	Line space	sina	_
		LSC IO, NEXI IO,	Search,	Duplicate,	Line spac	Jirig	
	1. Clicking fi	nd	finds f	urther occu	rrences.		
2	2. After com	pleting the work		box is	closed.		
3	3	signifies	to the amo	ount of vertice	cal space.		
2	4. Several ti	mes you may red	cognize to	find same te	ext	_in a big docum	ient.
		stc					
		following questio			sentence:		
		Drop Cap?					

	2.	What do you means hyperlink?
	3.	What is Mail Merging?
Э.	An	swer the following questions in detail:
		How can you follow a link?
	2.	Write all steps to Mail Merge.
	3.	How will you replace a word 'india' with 'My India' in MS Word.
	4.	What is the importance of applying Drop Cap?

Lab Activity

Do the following activities.

Activity - 1

<<NAME>>

<<ADDRESS>>

<<CITY>>

Dear << NAME>>

Wishing you a very happy and prosperous Republic Day. Have a peaceful day.

Signature Vas Publication

- ⇒ Type the above letter in main document in MS Word but don't type the merge fields. Save the letter using Ctrl + S key combination.
- ⇒ Click on **Mailing tab**. Select Letter option under Select document type section. Click on **Next : Starting document** under Step 1 to 6.
- ⇒ Click on **Next: Select recipients** under Step 2 to 6.
- ⇒ Click on Type a new list radio button and choose Create option.
- ⇒ Make a list with the fields named and Name, Address, City and Phone No. Click on OK button.
- ⇒ Now enter records of your five classmates and click on **OK** button.
- ⇒ You will get a Save Address List dialog box. Specify a name in File name text box and click on **Save** button.
- ⇒ You will get a list of all the records on Mail Merge Recipients window.
- ⇒ Click on Ok button to get back to wizard. Click on **Next: Write your letter** under step 3 to 6.
- ⇒ Now place the cursor at the position where you want to display the record fields in the letter and click on **Insert Merge Field** button in the write and Insert Fields group on **Mailings tab**.
- ⇒ Choose a field which you want to display and click on **Insert** Button.
- ⇒ Similarly insert other fields, separate the field names by pressing the Enter Key.
- ⇒ Click on Finish and Merge button and click on Edit Individual Documents from the Drop-down menu.
- ⇒ Select All in the Merge to New Document dialog box. Click on OK button.
- ⇒ You will get a new document with all merged data in it.

⇒ Now save your document using **Ctrl + S** key combination.

This is how the mail merge is used for sending the same letter to different people.

Activity - 2

⇒ Prateek has organized her birthday party. She has sent invitation letters to all her friends.

Where are you celebrating your birthday this time? Invite all your friends and relatives to the party through a letter. Like Prateek, use the Mail Merge features of MS Word.

Teacher's signature

Teacher's remark: ★★★★

Teacher Corner

Please explain the use of Mail Merge facility to the student giving various examples and demonstrate each step of mail merge in a proper manner to make them understood the concept.