IT @ SCHOOL

Computer Science - Book 2

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❧ PREFACE ☙

Computers play a vital role in the modern world, and even the most basic jobs today involve technology. Therefore, computer education becomes essential in any student's development. Expertise in computing enables children think critically, be more creative and innovative, giving space for collaborative work and individual effort.

The series of books (Class III – IX) aim to holistically develop digital skills, keeping pace with the dynamically changing industry requirements.

IT education has no boundaries and irrespective of the field of work, each one is expected to have the following digital skills:

> ➢ MS Office (MS Word, MS Excel, MS PowerPoint)

> ➢ Photo / Image Editing

> ➢ Programming

> ➢ Website development

The enriched curriculum therefore covers a wide variety of topics across various classes: *TUXPAINT; MS Word 2007 (Level I, II & III) ; MS Excel 2007 (Level I, II & III); MS PowerPoint 2007 (Level I & II); Image / Photo editing software using GIMP 2.8; Scratch Programming; HTML Programming; Web creation tool using WordPress.*

The curriculum uses only open source software (freely available on the Internet) installed in Windows 7 Operating system.

A brief description of every concept and its application / purpose is provided in every lesson with colorful screen shots. This not only attracts the readers but also gives them an experience of self-learning. **'Activity Based Learning'** exercises have been included as part of the curriculum.

We hope this text book finds its place in the readers' library for future references.

INDEX

MS Word

RECAP OF MS-WORD AND FORMATTING TEXT

Activity 1 : Load MS Word window from Windows

Start → All Programs → Microsoft Office → Microsoft Word

Activity 2: Recall the following Navigation keys.

• Down/Up, Right/Left arrow keys, End/Home keys.

• Ctrl + Home/End

Open the document called KiteWithoutThread.docx

The kite without a thread

Once a father and son went to the kite flying festival. The young son became very happy seeing the sky filled with colorful kites. He too asked his father to get him a kite and a thread with a roller so he can fly a kite too. So, the father went to the shop at the park where the festival was being held. He purchased kites and a roll of thread for his son.

His son started to fly a kite. Soon, his kite reached high up in the sky. After a while, the son said, "Father, It seems that the thread is holding up a kite from flying higher, If we break it, It will be free and will go flying even higher. Can

- Press **Ctrl + End** keys together to go to the end of the document.
- Press **Ctrl + Home** keys together to go to the beginning of the document.
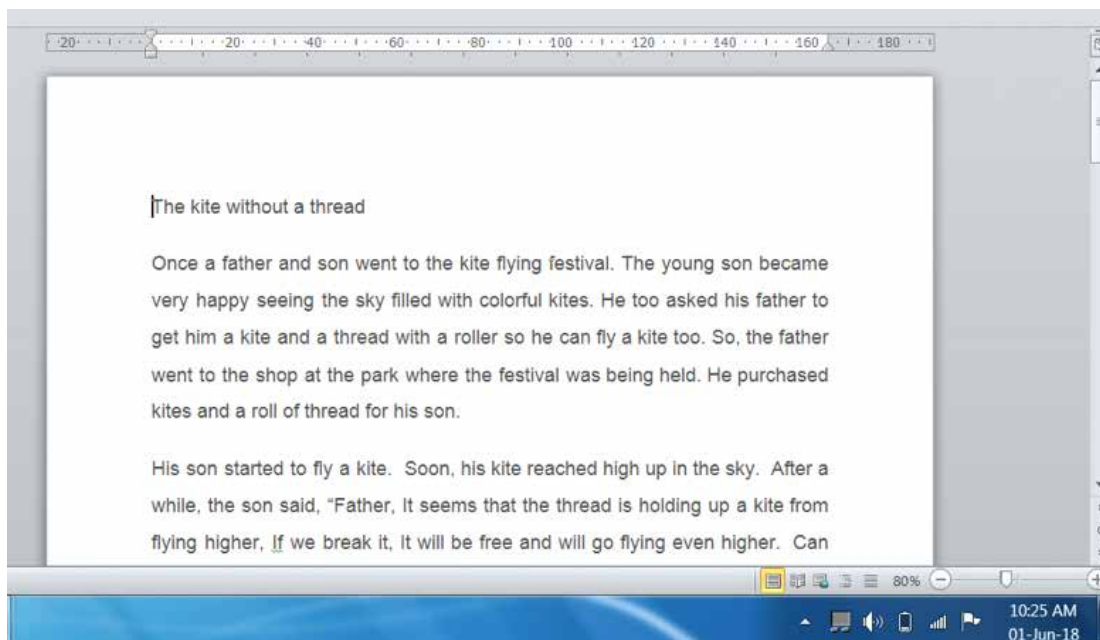
- Close the Word window by quitting Word. (File → Exit)

Activity 3a: Create a new blank document and type the following in it.

Activity 3b: Close the **Word** window and click **Don't Save** when Word shows the following

Activity 4: Type the following in a blank document.
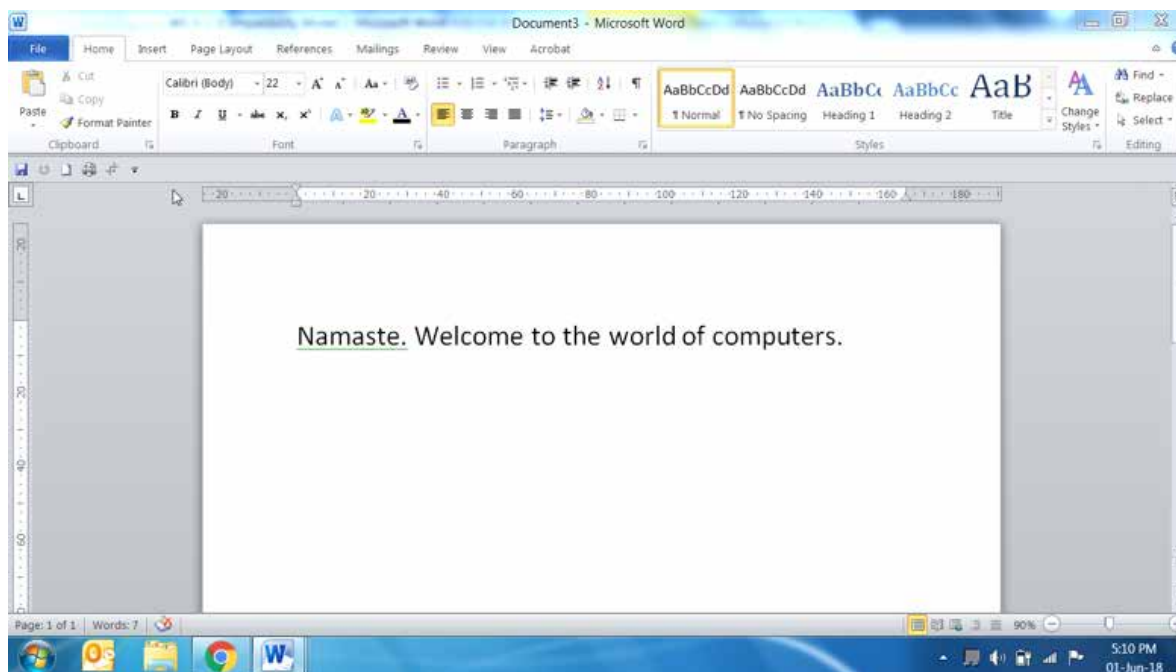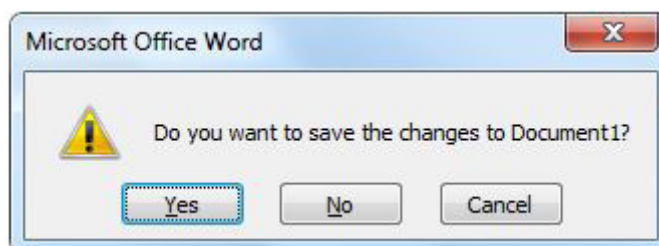
(a)   In the beginning of the poem, write the heading "AT THE LAST WATCH". (Use the arrow key to go to the beginning of the first line, type the title and press the Enter key twice.)

AT THE LAST WATCH

Pity, in place of love,

That pettiest of gifts,

Is but a sugar-coating over neglect

(b)   After the last line, type the name of the poet "- Rabindranath Tagore". (Go to the end of the last line, press Enter key twice and type the poet's name)

To a street beggar,

Only to forget the moment the first corner is turned

I had not hoped for anything more that day.

- Rabindranath Tagore

(c)   Select the entire text and press the space bar key. What happens? (Use **Ctrl + A**)

_____

(d)   Now click the **Undo** button from the **Quick Access** toolbar. What happens?

_____

_____

(e)   Press the **Redo** button. What happens?

_____

_____

(f)   Select the first line **"Pity"**

AT THE LAST WATCH

Pity, in place of love,
That pettiest of gifts,
Is but a sugar- coating over neglect

g)   Click the **Copy** button on the **Home** tab.

(h)   Paste it at the end of the document, below the poet's name. (Use the arrow keys to move to the last line, press **Enter** key if necessary and click the **Paste** button on the **Home** tab)

AT THE LAST WATCH

Pity, in place of love,
That pettiest of gifts,
Is but a sugar- coating over neglect
Any passerby can make a gift of it
To a street beggar,
Only to forget the moment the first corner is turned
I had not hoped for anything more that day.

- Rabindranath Tagore

Pity, in place of love,

(i)   Click the **Paste** button four more times.

> Pity,in place of love
>
> Pity,in place of love
>
> Pity,in place of love
>
> Pity,in place of love

(j)   Select the entire document and copy it to a new blank document. (**Ctrl+A, Copy** button, **File →New, Paste** button)
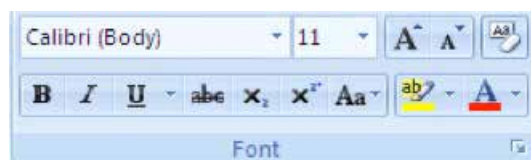
FORMATTING TEXT

Formatting means changing the appearance of the document to make it look attractive. This can be done by changing the font type, font size, font color, text alignment, adjusting margins and bold facing, italicizing, underlining the text, etc. There are two types of formatting in MS-Word.

- **Character Formatting :** It is applicable to the selected text.
- **Paragraph Formatting :** It is applicable to the entire paragraph.

There are several ways in which we can do Character formatting. To use any of the Character formatting options available, the text has to be selected first and then only any change can be made to it. The **Font** group of the **Home** tab has many options to format the text in a document.

When we move the mouse pointer over the selected text or click on it, a mini Toolbar appears with some options to format the text as shown below:

Now, click on the Font dialog box launcher in the Font group. A Font Dialog box appears as shown below. The box has many options to format the text of a document.
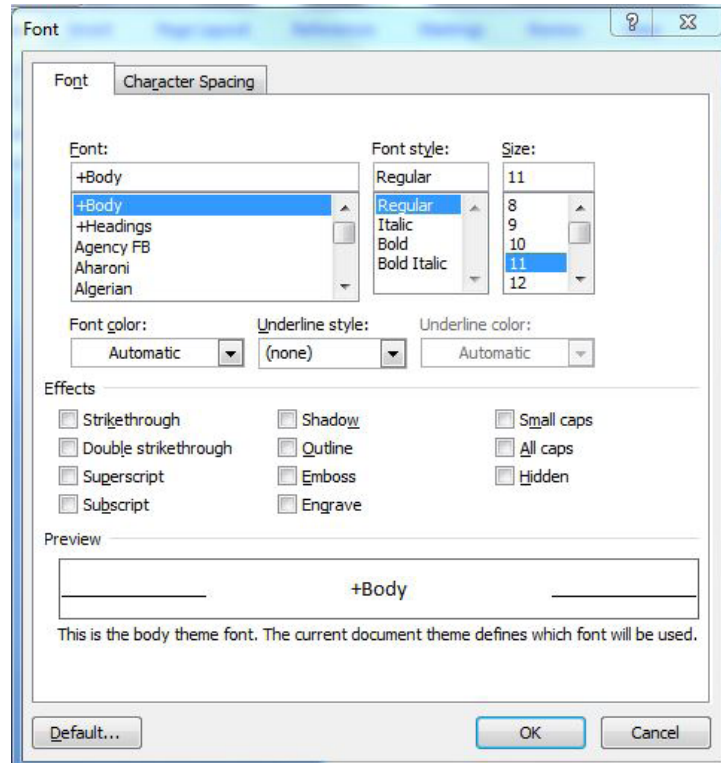
In Character formatting, the following options can be used in the **Home** tab.

OPTION	DESCRIPTION
Calibri (Body) ▾	Font: Changes the font type.
11 ▾	Font Size: Changes the font size.
B	Bold:Converts the text to bold and vice versa. (Shortcut - Ctrl + B)
I	Italics:Italicizes the text and vice versa. (Shortcut - Ctrl + I)
U	Underline: Underlines the text and vice versa. (Shortcut- Ctrl + U)
A ▾	Changes the text color.

- To format the font, select the text to be formatted. Click on the Home tab.
  Choose the Font, its size and the color from the Font group.
- A list of the different type of fonts are displayed in the Font drop-down menu.
- The size can be chosen from the Font Size drop-down menu.
- To choose the font color, select the text and then choose the desired color from the Font color drop-down menu.

ALIGNMENT OF TEXT

The **alignment** of text means the manner in which the text is placed between the left and the right margin of a page. There are many ways to set the alignment as shown below:

ALIGNMENT	DESCRIPTION
Align Left	The text is aligned along the left margin
Align Right	The text is aligned along the right margin
Center	The text is placed between the left and right margin
Justify	The text is evenly aligned from both left and right margin

CHANGE CASE

Word changes the case of the selected text. These are the options in the dialog box:
- **Sentence Case –** It capitalizes the first letter of each sentence in the selection.
- **Lowercase –** It changes all the capital letters to small letters.
- **Uppercase –** It changes all the small letters to capital letters.
- **Capitalize each word –** It changes the first letter of every word to capital letter.
- **Toggle Case –** It changes all the capital letters to small letters and vice versa.

INDENT

Indent is the increase or decrease of space between the left and right margin of a paragraph. In Word, the word indent is used to describe the distance, or number of blank spaces used to separate a paragraph from the left or right margin.

FORMAT PAINTER

Format Painter is used when you want to copy formatting from one item to another. For example, if you have written text in Word, and have it formatted using a specific font type color, and font size you could copy that formatting to another section of text by using the Format Painter tool.

Activity 1:
- Open Food groups.docx.
- Change the title to upper case.
- Increase the title's font size to 16.
- Center the title.

- Format the text in the following way. Use the Format Painter to copy the formatting of one text to another text.

Names of food groups	Arial font, size 14, Red color, Boldface
Nutrition	Times New Roman, size 12, Italics, Blue color, Capitalize Each Word
Benefits	Comic Sans MS font, size 10, Boldface, Green color

FOOD GROUPS, THE NUTRITION THEY CONTAIN, THE BENEFITS

Dairy and milk products
Contains Calcium
Strong, healthy bones

Fruit and vegetables
Contains vitamins, minerals, dietary fibre,
Fights disease and stay healthy

Grain
Contains carbohydrates
Gives energy

Lean meat and poultry, fish eggs, nuts, seeds
Contains protein
Builds, maintains and repairs tissues of the body

- Change the title to "Benefits of eating nutritious food".
- Left align the title.
- Right justify the subtitles of the paragraph

❧ BRAIN DEVELOPER ❧

I) WRITE WHAT THESE TOOLS DO

II) TICK THE CORRECT OPTION

(a)   Shortcut combination to make the text italic is …………..

(i) Ctrl + B   (ii) Ctrl + I   (iii) Ctrl + C

(b)   …………. means changing the appearance of the document to make it   more attractive.

(i) Selecting   (ii) Editing   (iii) Formatting

(c)   There are ……….. types of formatting applied in MS Word.

(i) two   (ii) three   (iii) four

III) MATCH THE FOLLOWING

a)   **B**   Italizes the text

b)   8   Underlines the text

c)   *I*   Maximum font size

d)   72   Makes the text appear thicker and darker

e)   U   Minimum font size

Teacher's Signature

BULLETS AND NUMBERING

You can add bullets or numbering to your text to set it in a point-wise manner. When you turn the bullets and numbering feature on, every new line begins with a bullet or a number each time you press Enter. This feature is very useful when you are making a list or a point-wise report.
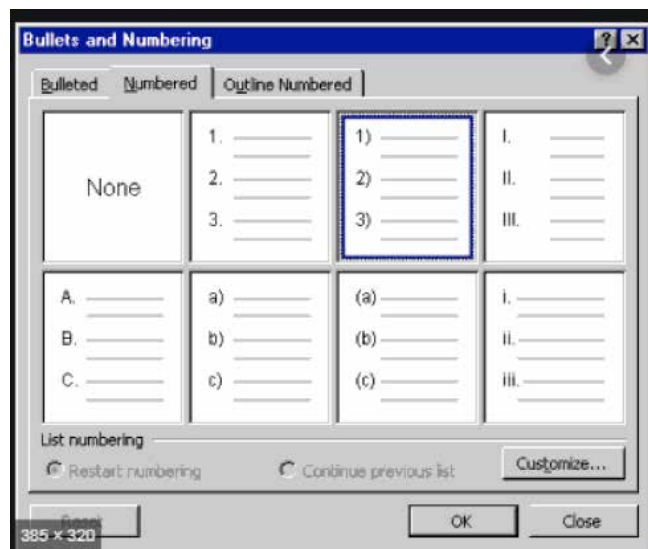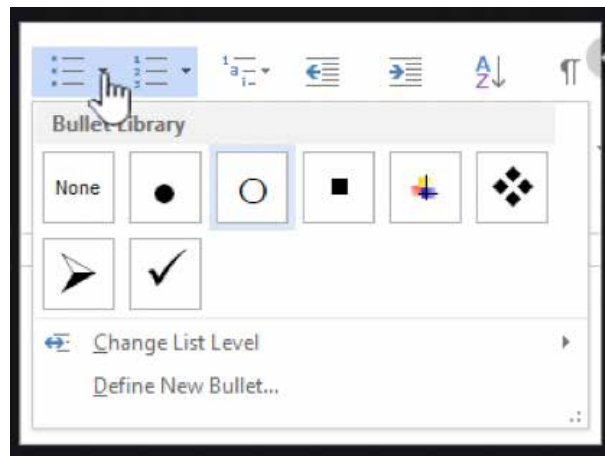
To add bullets or numbering, click on the bullets icon to add bullets, or click on the numbering icon to add numbering to your list. To choose the style of bullets or numbering, just click on the arrow next to the Bullets or Numbering icon from the Paragraph group.

To remove the bullets, select the text from which you want to remove the bullets or Numbering, and click on bullets or numbering.

WORD ART

Word Art is a text-styling tool of MS Word that allows us to use special effects such as bending, twisting, shading and rotating text in our documents. There is a gallery from which styles can be selected. Follow these steps.

- From the 'Insert' tab, click on the Word Art button in the 'Text' group. A 'Word Art' box opens.
- Select a Word Art style and click on it. A 'text box' appears in the document.
- Type the text in the space provided in the text box.
- Choose the style of the shape from the 'Shape Styles' group of 'Format' tab.

 To close Word Art, click away from the Word Art text.

INSERTING GRAPHICS

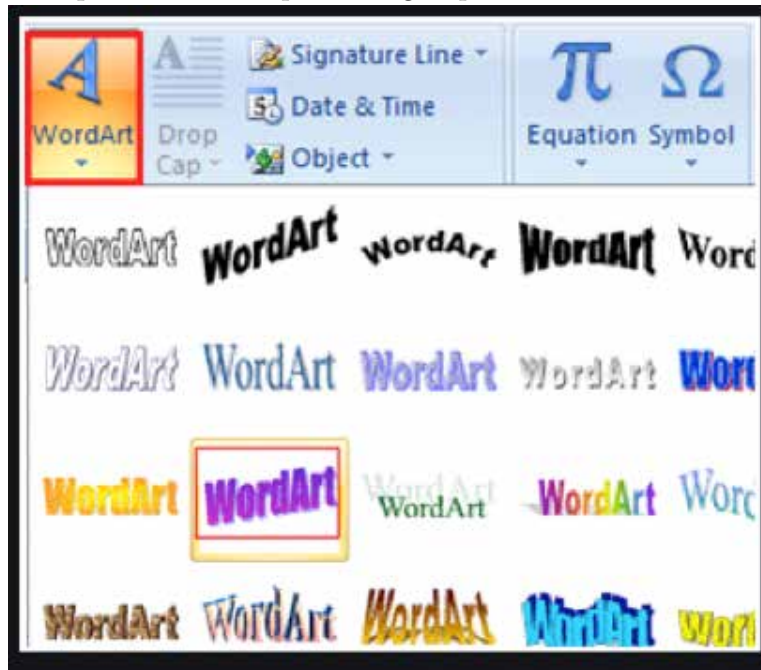'A picture is worth a thousand words'. This quote very simply conveys how important graphics like Clip Art, Pictures or images are used in a document.

INSERTING A CLIP ART

Clip Arts are ready-made images used to illustrate a document. MS Word has a big gallery of Clip Arts. The various steps to insert a Clip Art in a document are listed below:

1. Place the cursor in the document where you want to insert the Clip Art. Now in the ' Insert' tab, click on Clip Art.
2. MS Word displays the Clip Art gallery on the right hand side of the window. Click on the Search for box and type the name of the picture you want and simply click on the Go button.
3. Many pictures appear in the box. Click on a picture to select it.
   The picture will get inserted in the document. You can drag and resize the picture in your document.
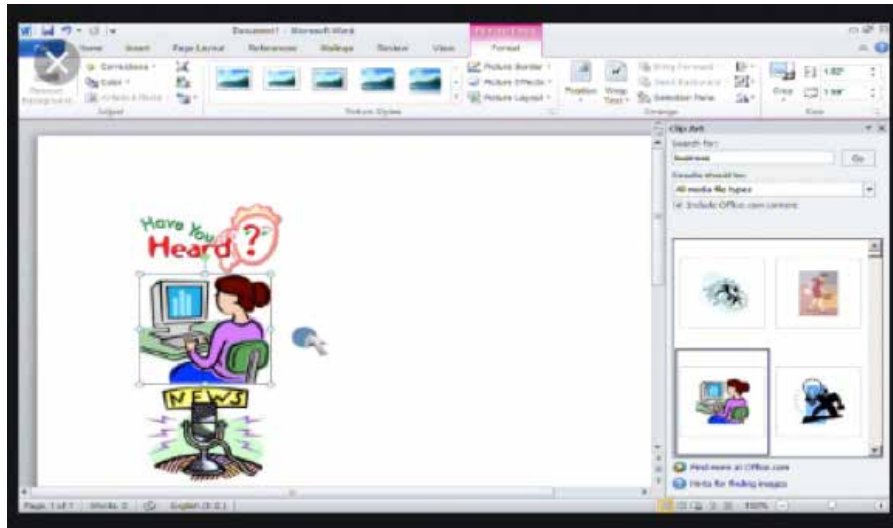
INSERTING A PICTURE FROM A FILE

The steps to insert a picture from a file are given below:

- Place the cursor in the document where the picture is to be inserted.
- Click on the picture option in the 'Insert' tab.
- An 'Insert Picture' box appears. Find and select the desired picture in the computer.
- Click on the Insert button. The picture gets inserted.

Once the picture is inserted in the document, it can be moved from one location to the other, resized or text wrapped.
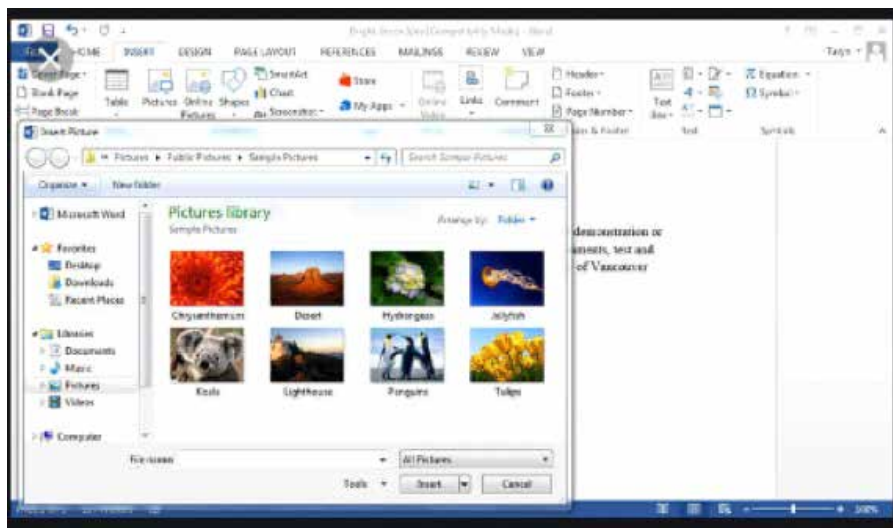
SETTING A PAGE BACKGROUND AND BORDER

Word allows you to put a border around most of the items in your document, such as text, pictures and tables. You can add a border either to all the pages in your document or certain pages in your document.

To create a page border in MS Word,

- Open Microsoft Word.
- Click on the **Page Layout tab.**
- In the **Page Background** group, click the **Page Borders** option.
- In the Borders and Shading window, click the **Page Border** tab.
- Select **Box** if you want a square border around your page.
- Select the **Style** of border you want on the page, which can be solid, dotted, or dashed. Select the **Color** and **Width** of the border. If you want to select artwork to use as the border, click the down arrow of the **Art** drop-down menu.
- Once you've selected all the border options you want to use in your document, click the **Ok** button to apply the border.

Activity 1: Type the following in a blank document and use bullets.

One who is spiritual, i.e. follows Dharma, imbibes the following ten qualities:

- Dhriti   :   Patience
- Kshama   :   Forgiveness
- Dama   :   Concentration of Mind
- Asteya   :   Non stealing
- Shoucha   :   Cleanliness (external and internal)
- Indriyanigraha   :   Control of all senses
- Dhee   :   Intellect backed by reasoning
- Vidya   :   True knowledge
- Satya   :   Truthfulness
- Akrodha   :   Not getting angry

Activity 2:

Write a recipe for how to prepare a sandwich using bread, butter and jam. Create list of ingredients required using bullets. Use numbered lists for the 'steps to make the sandwich'.

Activity 3:

Using word art to create a banner for Teachers Day. Save the document as Teachers Day.

Activity 4:

By looking at the below screenshot create a similar advertisement in search of your missing dog. Use appropriate word art styles and clipart/picture wherever required as per the instructions given.
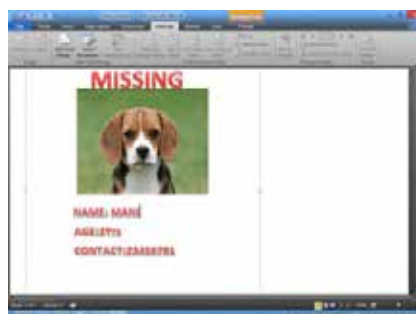
Activity 5:

Your favourite bed time story is Red Riding Hood. Design the front page of the story book in an attractive manner.

Activity 6:

It is the 'World environment day'. Your class teacher has asked you to prepare a poster to be displayed on the class board. Use your imagination and design an attractive poster. Also set a page background and give a suitable border to it. For ex 'World Earth and day to Day" is done for you.

❧ BRAIN DEVELOPER ❧

....

I)   FILL IN THE BLANKS:

(a)   Ready-made gallery of pictures in MS Word is called ………….

(b)   ………… is a text-styling tool of MS Word.

(c)   To remove bullets, click …….. button.

(d)   Bullets and Numbering are found in the ………. tab.

(e)   Clip Art is found in the ……… tab.

II) UNSCRAMBLE THE FOLLOWING WORDS:

TRARWOD   …………..

STEBLLU   …………..

CUTPIER   …………..

Teacher's Signature

TABLES AND GRAPHICS

A **table** is a grid of rows and columns that you can fill with text and graphics.

A **row** is a horizontal series of cells whereas a **column** is a vertical series of cells. A **cell** is a rectangular box which is formed by the intersection of rows and columns.

Tables are used to organize and present information in a systematic manner. You can also use tables to input numbers and then perform calculations on them.

CREATING A TABLE

- To create a table in MS Word 2007, we first open the Word document, and place the cursor where we want to insert the table.
- Click on the **Insert** tab.
- Click on the drop-down arrow in the **Tables** group.
- A drop-down menu opens up.
- Click on the grid and drag the cursor to select the number of columns and rows you want.
- The table gets inserted.

DRAWING A TABLE

 The steps to draw a Table are given below.
- Click on the **'Insert'** tab.
- Click down on the drop-down arrow in the **Tables** group.
- A drop-down menu opens up.
- Click on the **Draw Table** option. Once this option is selected, the cursor changes to a pencil tool that helps you to draw a table.
- Click and drag the cursor diagonally to draw the boundary of the entire table.
- You can draw the rows and columns inside it one by one.
- A set of **Table Tools** also appears on the toolbar for adding styles to the table being drawn.

To delete a table, click on the table inserted. Click on the **Layout** tab from the ribbon and click on **Delete** option in the Rows and Columns group. A submenu opens up.
- Click on **Delete Cells** to delete the selected cell.
- Click on **Delete Columns** to delete the selected column.
- Click on **Delete Rows** to delete the selected row.
- Click on **Delete Table** to delete the selected table.

Activity 1:

Create a table containing the names of your friends, their home address and telephone numbers. Use table grid to insert the table.

Activity 2:

Open MS Word window and create a table using the following information:

List of people to be invited	List of items to be purchased	List of games to be played
Charlie	Balloons	Four corners
Supriya	Streamers	Passing the parcel
Rohan	Ribbon	Musical chair
Vivek	Caps	
Kalpana		
Mukthi		

Perform the following operations for the above list for a birthday party celebration.

Step 1: Add the names of Rahul, Pooja, Dinki and Tej which is missing from the list of people to be invited.

Step 2: Cake, Eatables and Return gifts are missing from the items to be purchased.

Step 3: There are two more games to be played i.e. Pin the tail on the monkey and Simon says.

❧ BRAIN DEVELOPER ❧

. . . .

I) WRITE THE DIFFERENCE BETWEEN THE ROWS AND COLUMNS

II) MATCH THE COLUMNS

Column A

1) Delete

2) Table

3) Rows

4) Columns

Column B

a) Horizontal series of cells

b) Layout tab

c) Vertical series of cells

d) Insert tab

Teacher's Signature

HEADER AND FOOTER

CHAPTER 4

Besides typing texts and creating tables, MS Word has many other features that make it the best tool for creating and maintaining official as well as personal documents. Some of these features are Header and Footer, Endnotes and Footnotes, Symbols and Special Characters. Let us learn about Header and Footer in this lesson.

HEADER AND FOOTER

Header refers to the top of the page that can bear a title, date, page number, a picture or even your name, or anything that you want. Footer can bear exactly the same things as the header, except that it is at the bottom of the page.

INSERTING HEADER AND FOOTER

The steps to insert a header and footer are given below.

1. Click on the **Insert** tab. Select the **Header** or **Footer** option, depending on what you want to insert, from the **Header and Footer** group.
2. A drop-down submenu opens up with a list of headers. You can scroll down to get many options. Once the header is selected, Header and Footer tools open up.
3. A dotted line marks the Header and Footer area in the document. Place your Cursor in the top box, that is the header, to insert text, pictures, time or date into it. Similarly, to insert text, pictures, time, date or any other thing into the footer, place the cursor in the bottom box.

    The Header and Footer tools help you to insert page numbers, pictures, clip arts, date and time in the header or footer.

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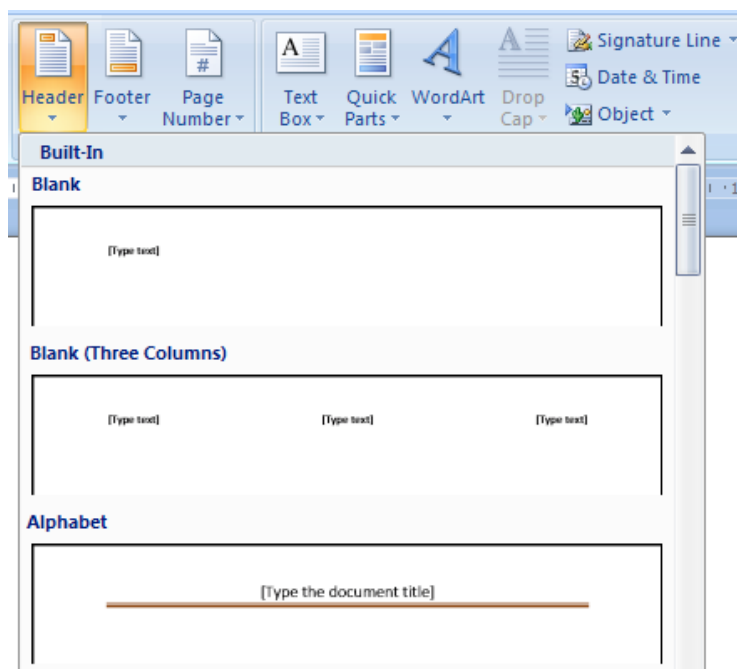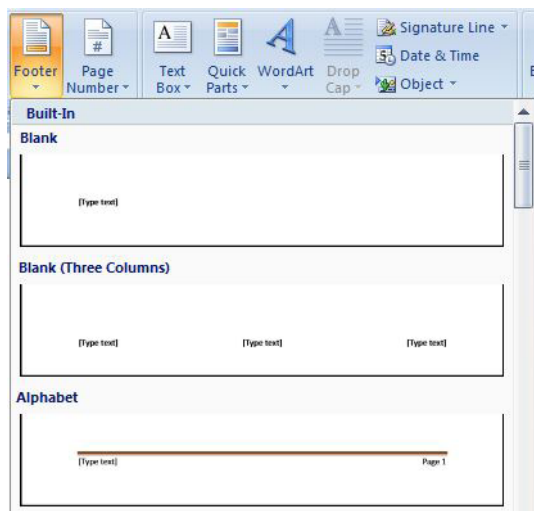
FIND AND REPLACE

The various steps to find a particular word or phrase and replace it with another word or phrase in a document are given below.

1. Click on the **Find** button in the **'Home'** tab. A 'Navigation' window box appears towards the left side of the document window.
2. Type the word that has to be found in the **'Search box'** of the navigation window.
3. The searched words will be highlighted in the document with yellow color.
4. To replace the word with another word, click on **Replace** button in the Home tab.
5. The 'Find and Replace' dialog box appears.
6. Type the word that has to be replaced in the 'Replace with' box and click on the **Replace/Replace All** button.

SPELLING AND GRAMMAR

In MS Word, there is a built-in dictionary and a set of grammatical rules to check a document. An incorrect spelling of a word in a word document can be seen with a single red wavy line beneath it. Similarly, a line with grammatical mistakes are seen with a green wavy line.

The various steps to start **Spelling and Grammar** checking are given below.

1. Place the cursor on the word with the spelling mistake. Click on the 'Review' tab to select 'Spelling and Grammar' button.
2. 'Spelling and Grammar' dialog box appears. The text which is misspelt is highlighted and a list of words with the correct spelling is displayed in the 'Suggestions Panel' at the bottom of the dialog box. Choose the options from the table to move further.

| OPTION	DESCRIPTION
Ignore once	Click on this button to ignore the error shown.
Ignore All	Click on this button to ignore a particular error in the whole document.
Add to Dictionary	Click on this button to add the highlighted word to MS Word dictionary.
Change	First choose a word from the Suggestions panel, then click on this button to insert the corrected word.
Change All	Click on this button to change the word wherever it appears in the document.
Auto Correct	Click on a suggestion to accept it and then click on the Change button. This will change the word on its own while we are typing.

Activity 1:

1. Open **KiteWithoutThread.docx.**
2. Create a header "Stories for Today"**(Insert →Header→Blank)**
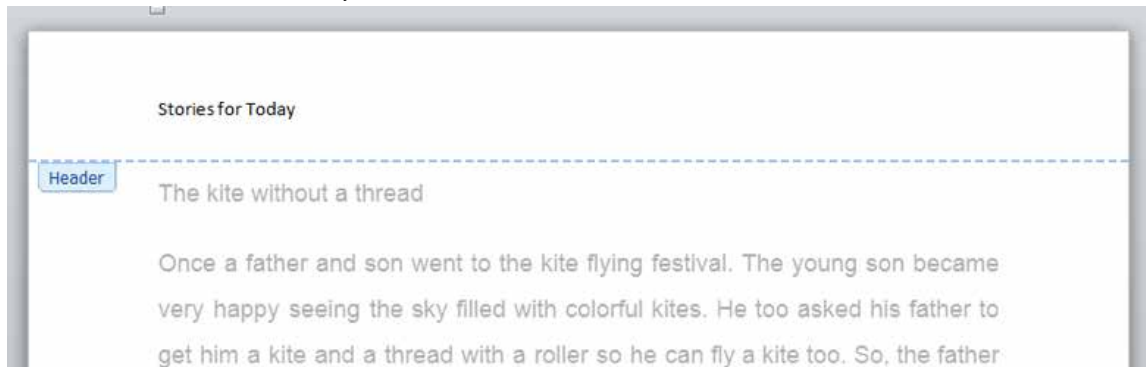
3. Create a footer containing the page number.
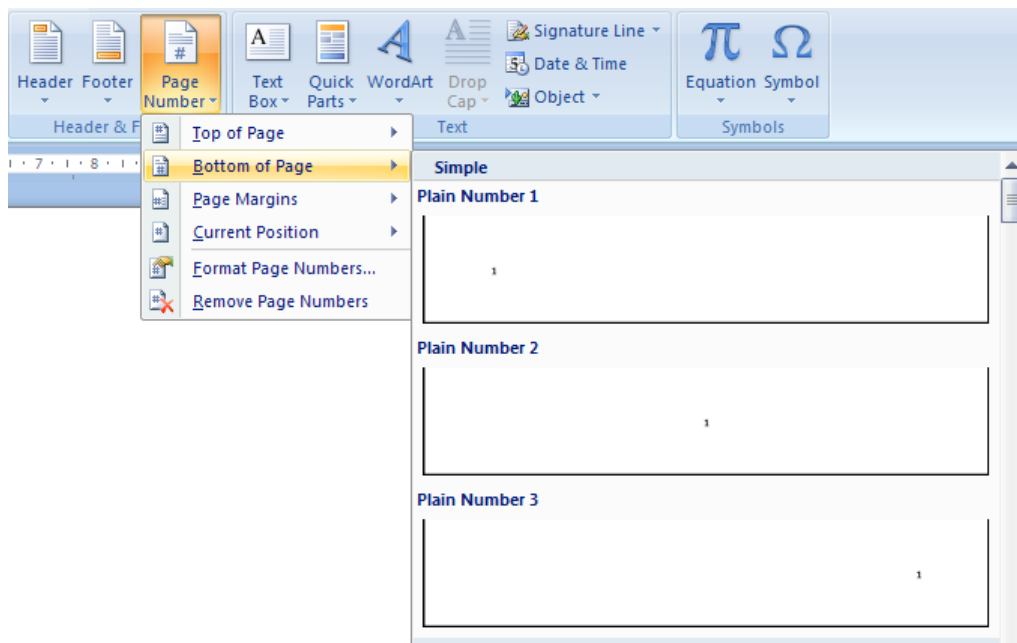
4. Double click outside the header/footer area in the document to return to the normal view.
5. Now scroll down to page 2 to see the header and footer.
6. Create a centered heading and type "Inspiring Stories".
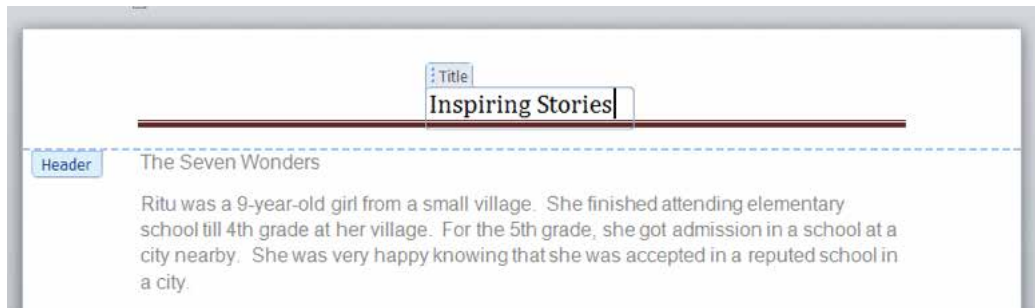
7. Create a footer with the page number and a text. Type **"Robin Publications" i**n the text area.
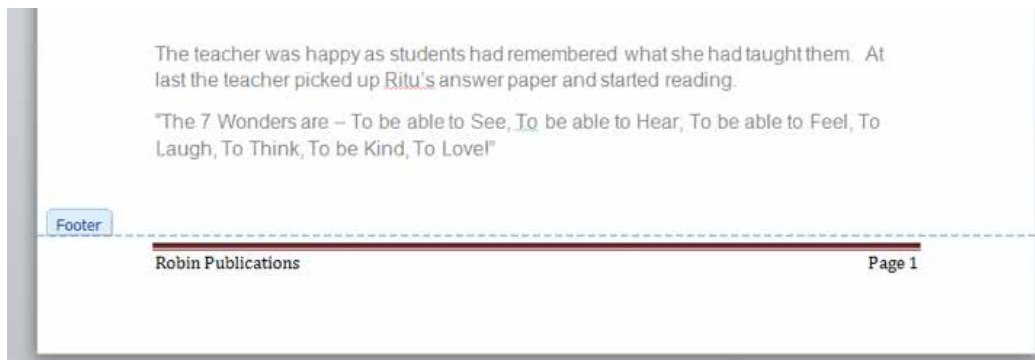
Activity 2:

- Open **Abraham Lincoln.docx.**
- Create a header of style **Austere (Even page)**.

- Go to the footer using the **Go To Footer** command.
- Create a footer in the **Annual style.**

- Go to the header. Change it to **"ETERNAL HEROES"**
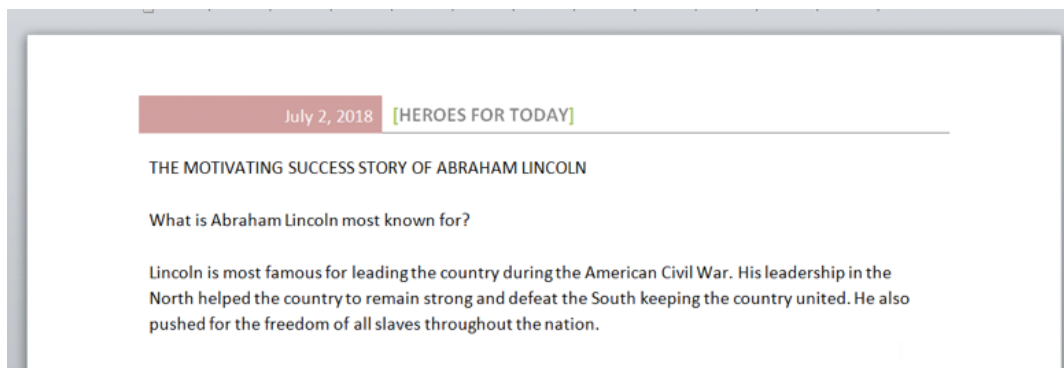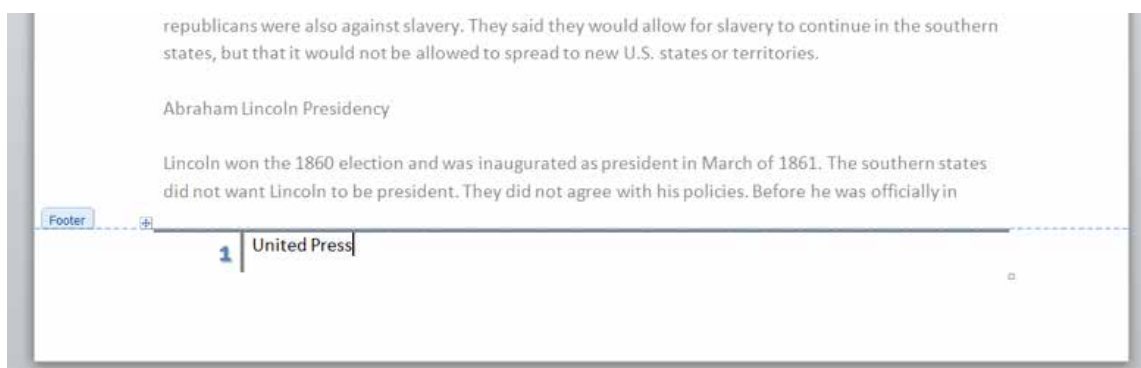- Come out of the header footer view to the main document.
- Double click on the footer to edit it.
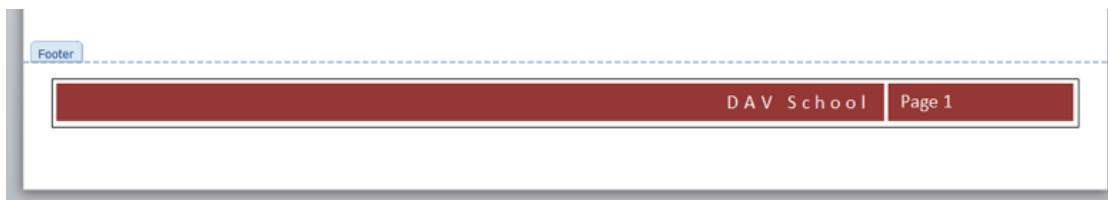- Type "/" and insert the current date.

- Set different header and footer for the odd and even pages by selecting **"Different Odd and Even pages"** option.
- Increase the space between Header/Footer and edge of the page to 1 inch.
- Create a new document and create a header and footer in the following style.

Header

Footer

Activity 3:

Type the following paragraph in MS-Word :

My family consists of four people. My father who is the head of the family, my mother, my little brother and myself. We are a happy nuclear family. We love each other a lot and are always there for each other. We enjoy each others company and we laugh a lot. I feel blessed to have such a great family.

Step 1: Find and Replace the word 'little' with 'younger'

Step 2: Identify and correct the spelling and grammatical errors

Step 3: Save the file

Activity 4:

Type the following paragraph in MS-Word. Find the word 'Geography' and replace it with the word History in the text below.

Geography

History is an account of the past. It is about the people, places and events in the world that have made a significant impact on the way we have evolved today.

Activity 5:

Type the following sentence in MS Word.

Mango is my favouritefruit
- Are you getting any wavy lines? If yes, under how many words.
- Select the sentence and click on 'spelling and grammar' command.
- You will get suggestions to change or ignore. What would you prefer to do in this case and why?

ᏬᏬ BRAIN DEVELOPER ᏬᏬ

I) FILL IN THE BLANKS:

1. The Header and Footer tools are in the ………. Tab.

2. ……….. refers to the bottom of the page that can bear a title, date, page number, or even a picture.

3. Grammatical errors are indicated with ………wavy lines.

4. MS Word has a built-in ……….. to check the spelling of a word.

5. Misspelt words can be seen with a single ……..wavy line beneath them.

II) ANSWER THE FOLLOWING:

1. What does a Find button do?

2. What does a Replace button do?

Teacher's Signature

MS Excel

MS-Excel – Introduction to Excel Workbook and worksheet

Microsoft Excel is a spreadsheet program developed by Microsoft for windows, MacOS, Android and IOS and is mainly used to perform arithmetical calculations. Excel is a spreadsheet program that allows you to store, organize, calculate and analyze information.
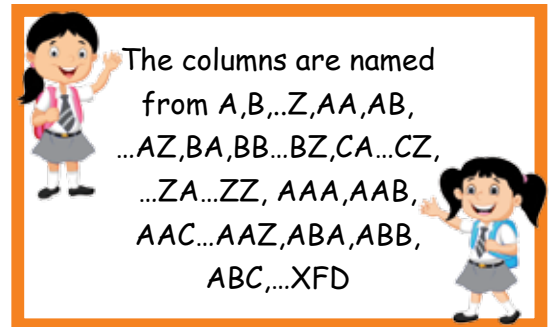
LOADING MS-EXCEL 2007

Step 1: Click the Start Button

Step 2: Click All Programs

Step 3: Click Microsoft Office

Step 4: Click Microsoft Office Excel 2007

> The columns are named from A,B,..Z,AA,AB, ...AZ,BA,BB...BZ,CA...CZ, ...ZA...ZZ, AAA,AAB, AAC...AAZ,ABA,ABB, ABC,...XFD

When Excel window is loaded we see Book1 which is a workbook i.e collection of many worksheets. Every worksheet is divided into many rows and columns. The horizontal lines are called rows and vertical lines are called columns.

The intersection of a column and row is called a cell. Every cell is referred by cell address (The column name followed by the row number). Cells are the basic elements of a worksheet where we type in data. Cell is a box where we can enter text or other data.

There are totally 10,48,576 rows and 16,384 columns in every worksheet. The rows are number from 1,2,3… and the columns are named as A,B,C…XFD.

By default an Excel workbook displays 3 worksheets.

> Charles Simonyi is the father of word and excel.

DID YOU KNOW
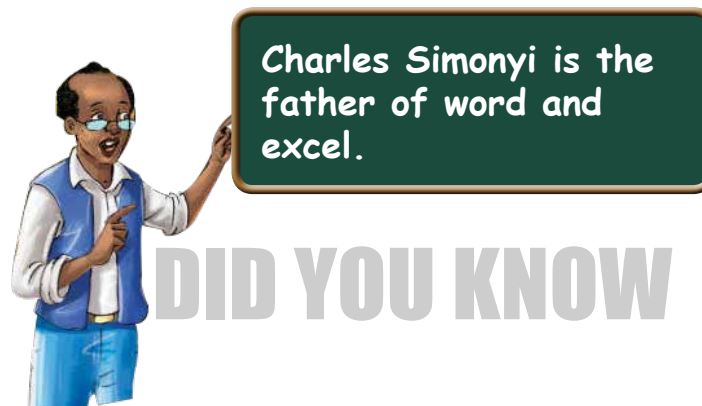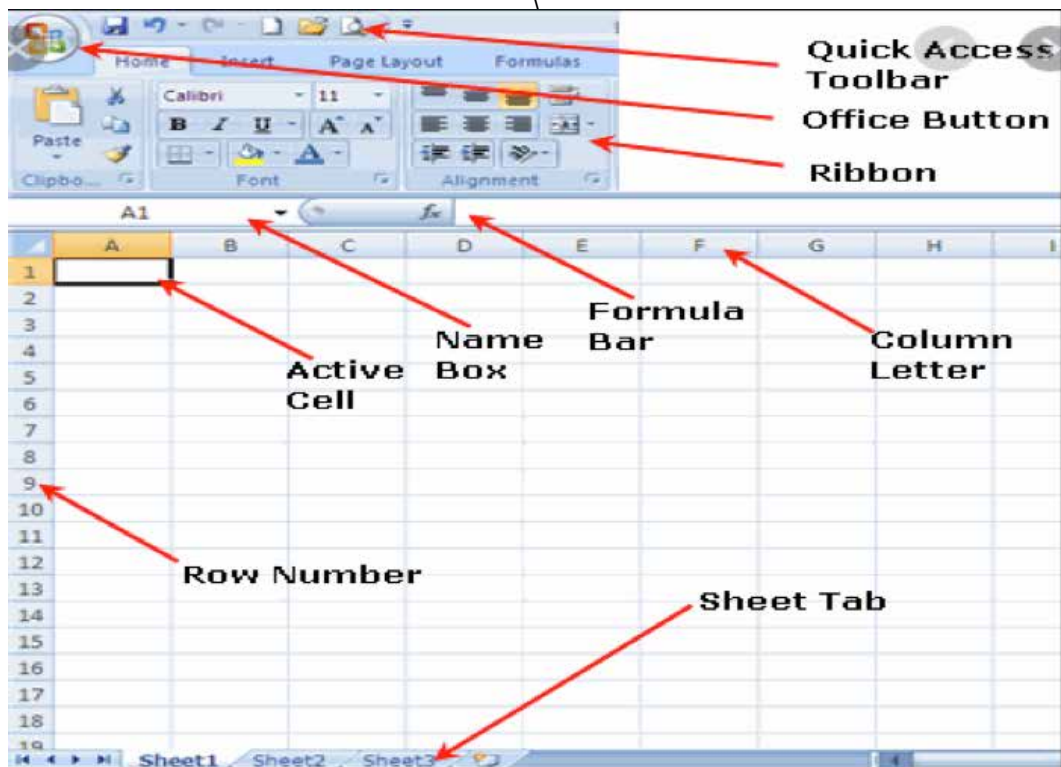
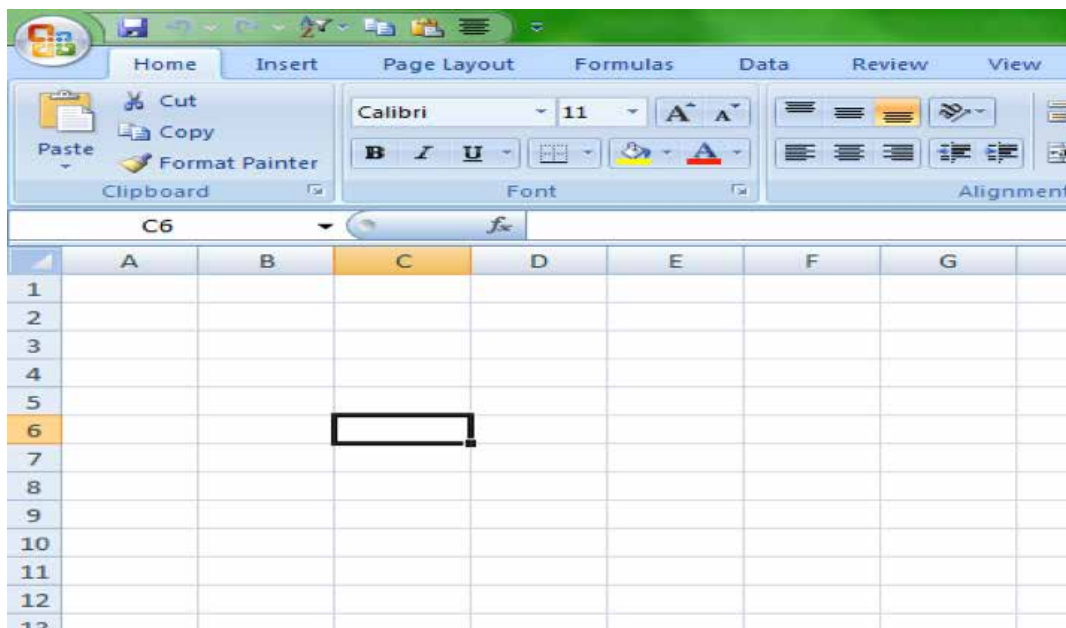The cell which has the dark border around it is called the Active cell. In the example given below **C6 is the active cell.**

ELEMENTS OF THE EXCEL WORKSHEET

1. Office button

In the top left corner of the screen you will find the round Office button.

2. Quick Access Toolbar

Next to the Office button we see certain icons which are frequently used which is called Quick Access Toolbar.

3. Name Box

The name box shows the cell address of the currently active cell. When multiple cells are selected it shows the cell address of the first cell from left top.

4. Formula bar

The formula bar shows the contents of the cell typed by us. It shows the text / number / formula entered by us.

5. Ribbons

Ribbon is the primary interface you see at the top of the excel window below the title bar. The Ribbon has collection of tabs (7 tabs) and many icons.

6. Worksheet Area

The work area which is divided into many columns and rows is called worksheet area.

7. Sheet tabs

The sheet tabs are located just below the worksheet, on the left side.

Figure 5: The Sheet Tabs.

8. Status bar

The status bar is present in the lower edge of the worksheet window which displays various information about an Excel Window. It can be located below the sheet tabs with the words Ready / Edit , Display buttons and Zoom Control.

9. Scroll bar

Horizontal and Vertical scrollbars are present in the worksheet which is used to move to different area in the worksheet.

10. Layout Selector

It has three buttons as Normal , Page Layout and Page break view buttons to see the worksheet in different ways.

11. Zoom Control / Zoom Slider

The Zoom slider is present in the bottom right corner and is used to see the worksheet from 10% to 400%.
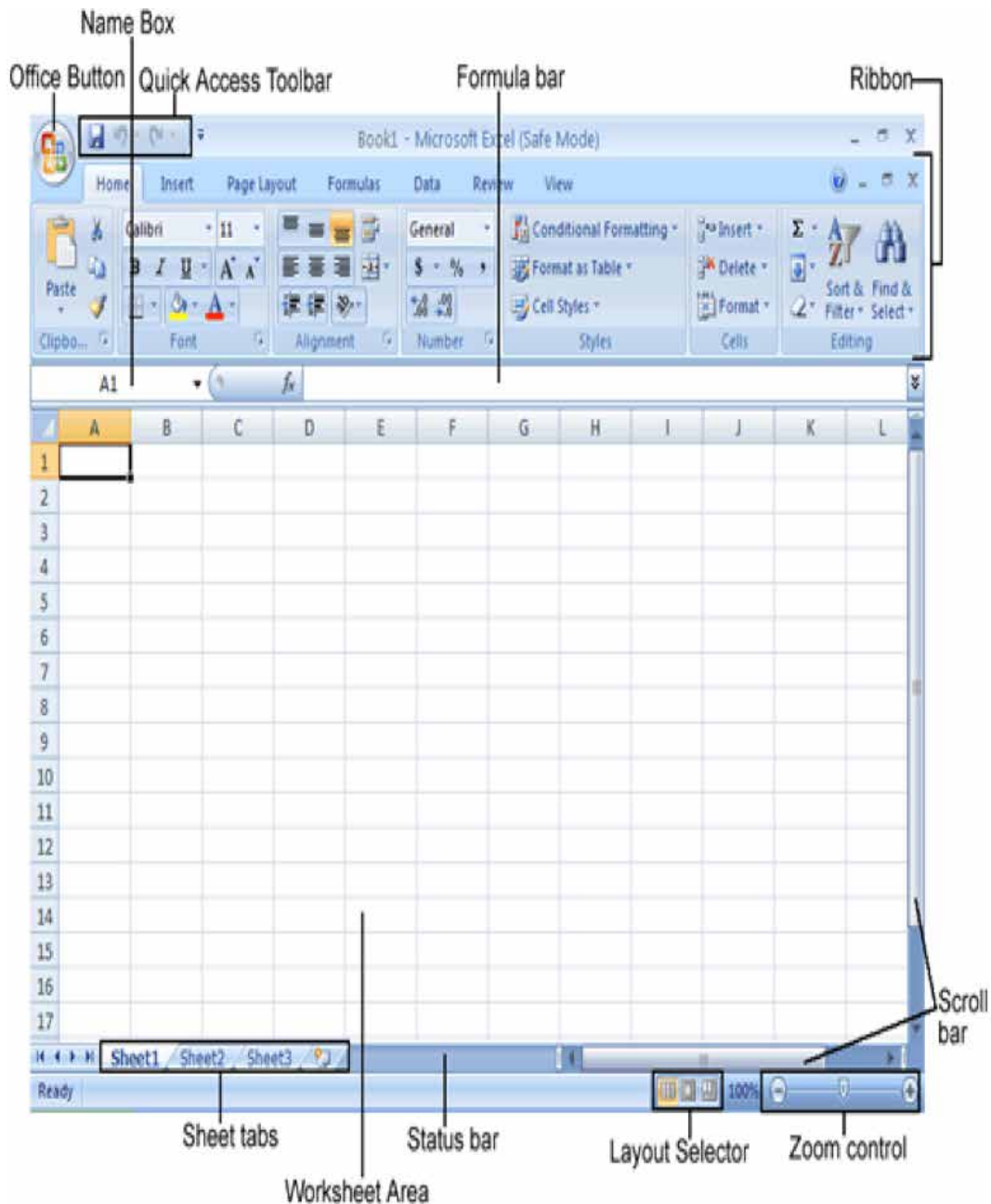
ENTERING DATA IN THE CELLS

Before you can type data into a cell, you need to make it active. You can make a cell active by clicking directly in it or by moving the active cell left, right, up and down with the arrow keys on your keyboard.

When you make a cell active, it becomes highlighted with a black border. Start typing and the data is inserted into the active cell. If you press enter after you've finished typing data into that cell, the cell below becomes active.

Activity 1.1:

Enter your name and age in cells A2 and A4 respectively.

Step 1 : Click on cell A2 enter your name and press Enter key

Step 2: Click on cell A4 enter your age and press Enter key

Step 3 : Close the workbook without saving.

(Click on Office button and select Close. Click on No button not to save the changes.)

DID YOU KNOW?

Text is displayed closer to the left border (left alignment) Number is displayed closer to the right border (right alignment)

❧ BRAIN DEVELOPER ❧
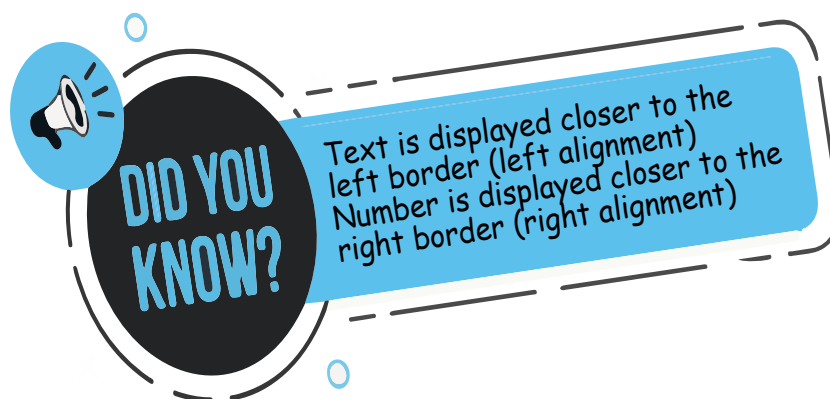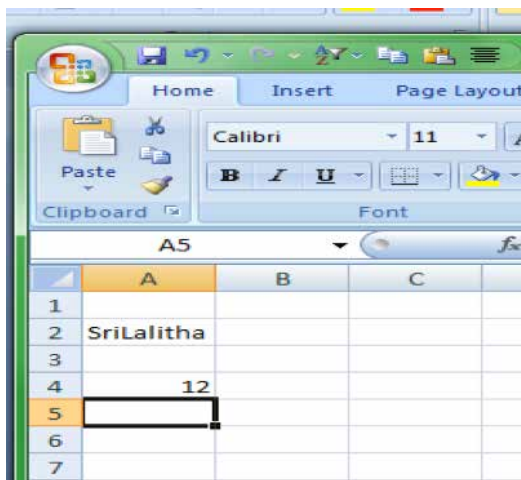
CHOOSE THE BEST ANSWER

1. Microsoft Excel is a popular _____ program.
    a) Word processor   b) Image Processor   c) Spreadsheet

2. A workbook is a collection of many _____
    a) Cells   b) Pages   c) Worksheets   d) Documents

3. The cell which has a dark outline border around it is called _____
    a) Name cell   b) Active Cell   c) Border cell   d) Inactive Cell

4. A workbook by default has _____ worksheet(s).
    a) One   b) Two   c) Three   d) Five

5. The ribbon has _____ tabs by default.
    a) 5   b) 6   c) 7   d) 8

6. There are totally _____ rows and _____ columns in every worksheet.
    a) 10000, 256   b) 1048576, 16384   c) 1048756, 16384

7. _____ shows the address of the active cell.
    a) Name box   b) Formula bar   c) Name cell   d)Status bar

8. A cell can contain _____.
    a) Numbers   b) Text   c) both numbers and text

9. Numbers in a cell are _____ aligned.
    a) Left   b) Right   c) Centered   d) Justified

10. The basic unit of a worksheet into which you enter data in Excel is called
    a) Cell   b) table   c) Box   d) Column

Teacher's Signature

Every Excel sheet has 1,048,576 rows and16,384 (upto XFD) columns .

Did you Know

LOADING EXCEL AND A NEW WORKBOOK

Once Excel is loaded by default Book1 is available for us to use. Click the Office button and choose Close to close the Book1.

CREATING A NEW WORKBOOK

A new workbook is created by clicking on the Office button and selecting New option from it. A window as shown below appears. Select Blank Workbook and click the Create button which appears at the bottom right side.
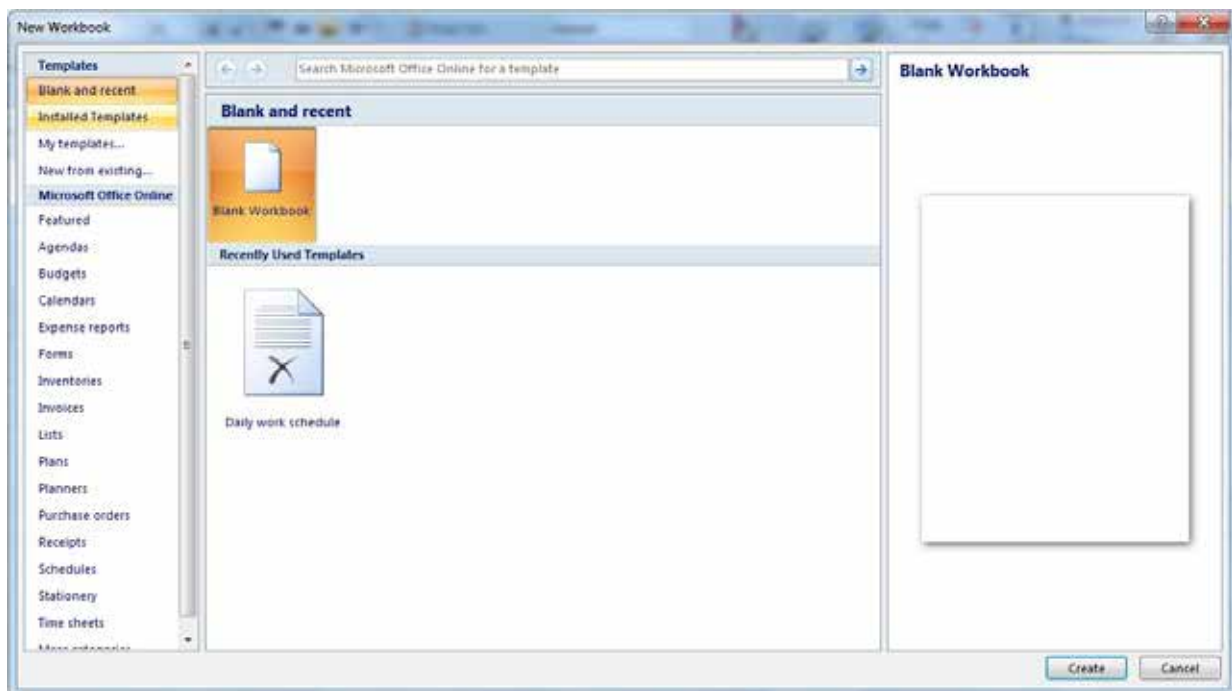
The Steps are as below:

1. Click the Office button. The Office menu appears.
2. Choose New. The New Workbook dialog box opens.
3. Click the Blank Workbook icon. The Blank Workbook icon resides in the middle pane of the New Workbook dialog box.
4. Click the Create button. Excel creates a new, blank workbook based on the default template.

NAVIGATION IN A WORKSHEET

Moving around the worksheet is called navigation. This is done either using the keyboard or mouse. When a mouse is used for navigation, point to a cell and click on it or scroll the mouse to reach a particular cell. When a keyboard is used the arrow keys are used to go up/down/left and right from the active cell.

When we create a new Excel workbook cell A1 is the active cell by default.

| Left Arrow / Tab	Moves one cell to the left
Right Arrow / Shift + Tab	Moves one cell to the right
Up arrow	Moves one cell up
Down arrow / Enter	Moves one cell down
Home	Moves to the first cell (Column A) of the current row
Ctrl + Home	To go to the first cell in the worksheet (A1)
Ctrl + End	To go to the end of the section of the worksheet that contains data.

ADDING WORKSHEETS IN A WORKBOOK

By default three worksheets are available in a workbook. Only one can be an active worksheet. Click on the button next to the Sheet3 tab to add a new worksheet.

Use Shift + F11 to insert a new worksheet

Click to add more worksheets
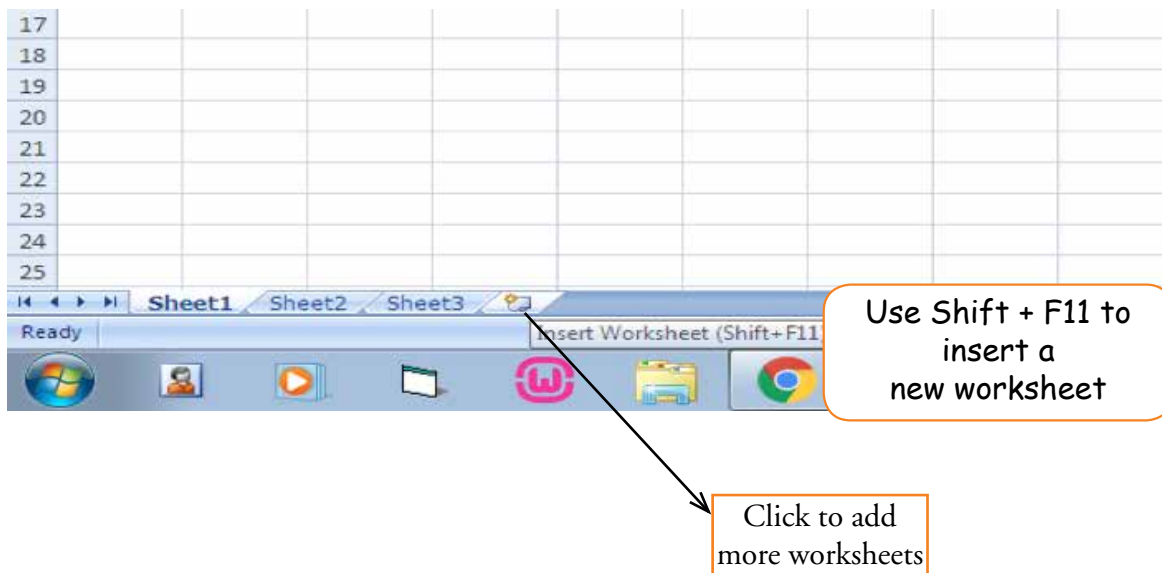
RENAMING A WORKSHEET

By default sheets are named as Sheet1, Sheet2, Sheet3…. The sheets can be renamed using the following steps.

1. Double-click the sheet tab you want to rename. You also can right-click the sheet tab and then click Rename on its shortcut menu.
2. Replace the current name on the sheet tab by typing a new sheet name. When you begin typing a new name, the previous name disappears.
3. Press Enter.
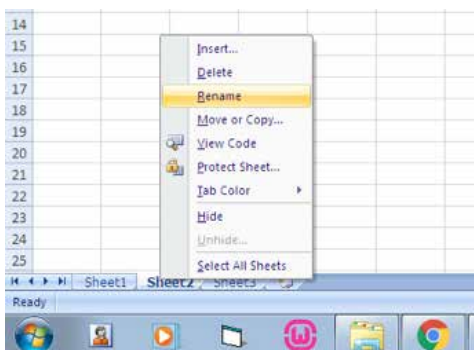
QUITTING EXCEL

We can close an Excel workbook which is currently open by selecting **Close option** under **Office button.**
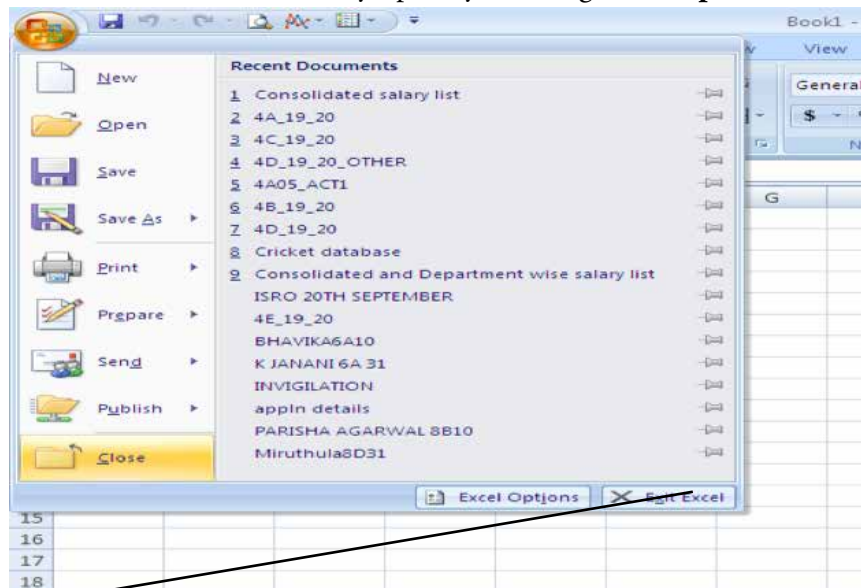
The Exit Excel button is used to Close all the open workbooks and come out of Excel 2007.

Activity 2.1:

Create a workbook in MS Excel with the following details

Step1: Click Office Button and click NEW

Step 2: Click Blank Workbook and click Create button

Step 3: Click on cell B1 Type SNO, in cell C1 type COUNTRY NAME and in cell D1 type CAPITAL

Step 4: Click on cell B2 and enter the number 1, in cell C2 enter Argentina and in cell D2 enter Buenos Aires.

Step 5 : Continue as step 4 to complete the table as below.

Step 6: Save the workbook with the name "4A05_act1" i.e. your class sec and roll Number (Click on Office button Save or use shortcut key Ctrl +S)

Step 7: Close the workbook (Click on Office button close)

Step 8: Open the workbook 4A05_act1 and add 5 more entries to it. (Click on Office button and select Open. Select the folder where the file is saved. Double click the file name or Single click the file name and click Open button)
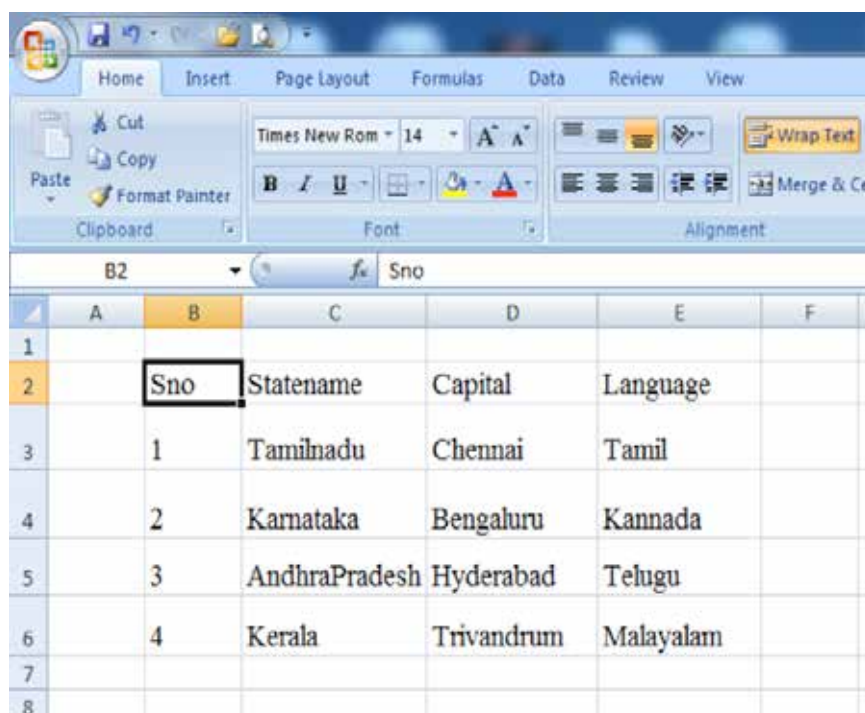
Step 9: Save the worksheet (Click Office button and choose Save)

Step 10: Close the workbook. (Click the Office button and choose Close)

Activity -2.2

Load MS Excel and open the workbook 4A05_act1

Based on the steps of Activity 2.1 complete **Activity 2.2 in Sheet 2.**

Activity- 2.3

Step 1: Load MS Excel

Step 2: Open the workbook 4A05_act1

Step 3: Click on Sheet 3 and enter the following data

Step 4: Click on Cell B3 and enter S.No

Step 5: Click on cell C3 and enter Name of the Student.
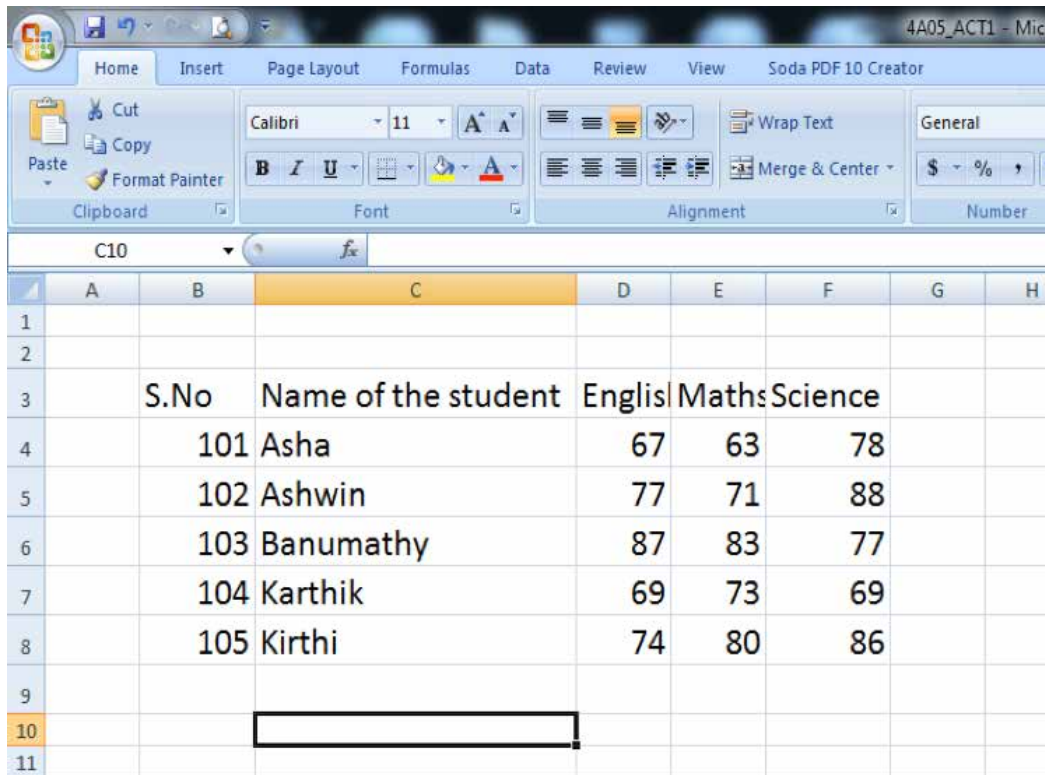
Step 6: Increase the Column width of C3 to show the entire text by placing the mouse pointer on the border between Column C and D and drag.

Step 7: Click on cell D3 and enter English

Step 8: Click on cell E3 and enter Maths

Step 9: Click on cell F3 and enter Science

Step 10: Enter the student details of 5 students in cells B4 to F8 and save the file.

S.No	Name of the student	English	Maths	Science
101	Asha	67	63	78
102	Ashwin	77	71	88
103	Banumathy	87	83	77
104	Karthik	69	73	69
105	Kirthi	74	80	86

DID YOU KNOW?

An excel cell can contain upto 32,767 characters.

❧❧ BRAIN DEVELOPER ❧❧

1. When Excel is loaded by default a workbook called _____ is created.

2. The New, Open, Close options are available under the _____ button.

3. Moving around the worksheet using the keyboard or mouse is called _____.

4. The four basic keys used for navigation in Excel are _____ keys.

5. The shortcut key _____ + _____ is used to go to the the first cell in the worksheet(A1).

6. When an Excel workbook is created we can see _____ worksheets.

Teacher's Signature

DID YOU KNOW?

It is not possible to name a worksheet as "History" in excel.

FORMATTING IN A WORKSHEET

EDITING IN A WORKSHEET

Changing the contents of a cell is called editing. Double click on the cell or press Function key F2 to edit a cell. Type in the new data and finally press the enter key.

The two modes in which a worksheet appears are Ready mode and enter mode. When we open Excel workbook it appears in Ready mode. When we start typing in a cell it changes to Enter mode. When we press F2 and change the contents it shows as Edit mode.

After pressing F2 key, Backspace key is used to remove the data from the left of the cursor position in a cell and Delete key is used to remove data at the current position in a cell.

SELECTING CELL CONTENT

- Click on the desired cell to select it.
- Click and move the mouse over a range of cells to select them all.

Note: Click outside the selected cell/ cells to deselect it

Shift + Space bar – To select a row in which the a cell is active

Ctrl + Space bar – To select a Column in which the a cell is active

Ctrl + A – To select the entire worksheet

Shift + Space bar – To select a row in which the a cell is active

Use Ctrl +C for Copy, Ctrl + X for Cut and Ctrl + V for Paste.

DELETING CELL CONTENTS

To delete the contents of a cell, Click the cursor in the cell and press Delete key in the keyboard or type new data.

TO COPY CELL CONTENTS

Cell contents can be duplicated by the copy and paste operation.

Select the cell or range of cells. Click the copy icon under the Home tab. Click on the desired cell where the data has to be pasted and then click the paste button.

Cut and Paste option can be used to move the cell contents from one address to another. Cut, Copy and paste options can be selected from the Drop down list which appears when you click Right mouse button after selecting cells.

FORMATTING IN A WORKSHEET

Changing the appearance of the cell content in a worksheet is called formatting. The formatting options available for a cell are Number, Alignment, font, border, Fill etc). Click on the Format Cells option under Format in the right hand side.

> The mode (Ready /Enter/ Edit) appears in the left side of the status bar

NUMBER FORMATTING

When we format cells in Excel, we change the appearance of a number without changing the number itself. We can apply a number format (0.8, $0.80, 80%, etc).

Decimal Places: The up and down arrow in the decimal places scroll box is used to increase or decrease the decimal places. By default 2 appears in the box.

COMMA SEPARATOR
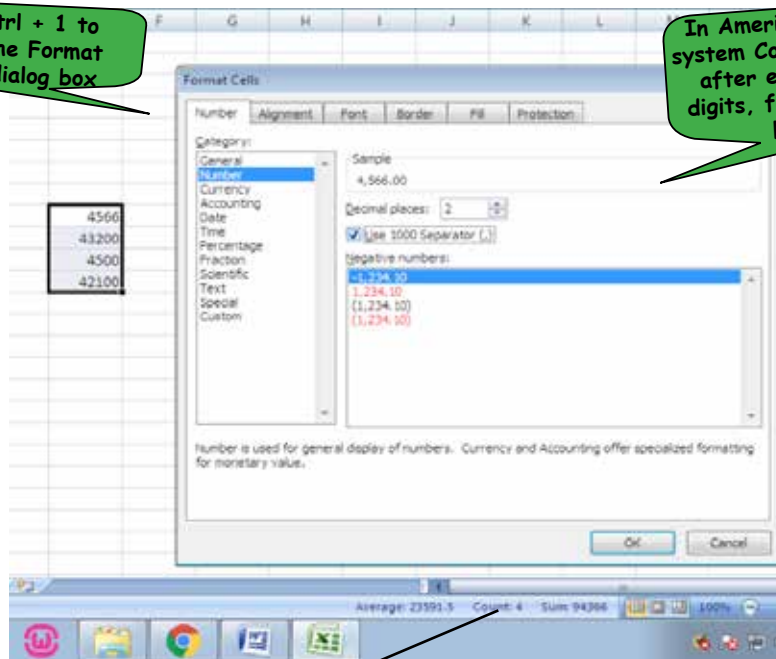
Click on the Use 1000 separator check box to get comma as per American number system. Ex: 120,560,450

Every excel sheet has 17,179,869,184. If we need 1 second to fill out one cell, it would take us 545 years to complete the whole sheet.

Use Ctrl + 1 to open the Format Cells dialog box

In American number system Commas appear after every three digits, from right to left.

Did you notice the Average, Count and Sum of the selected cells get displayed in the status Bar
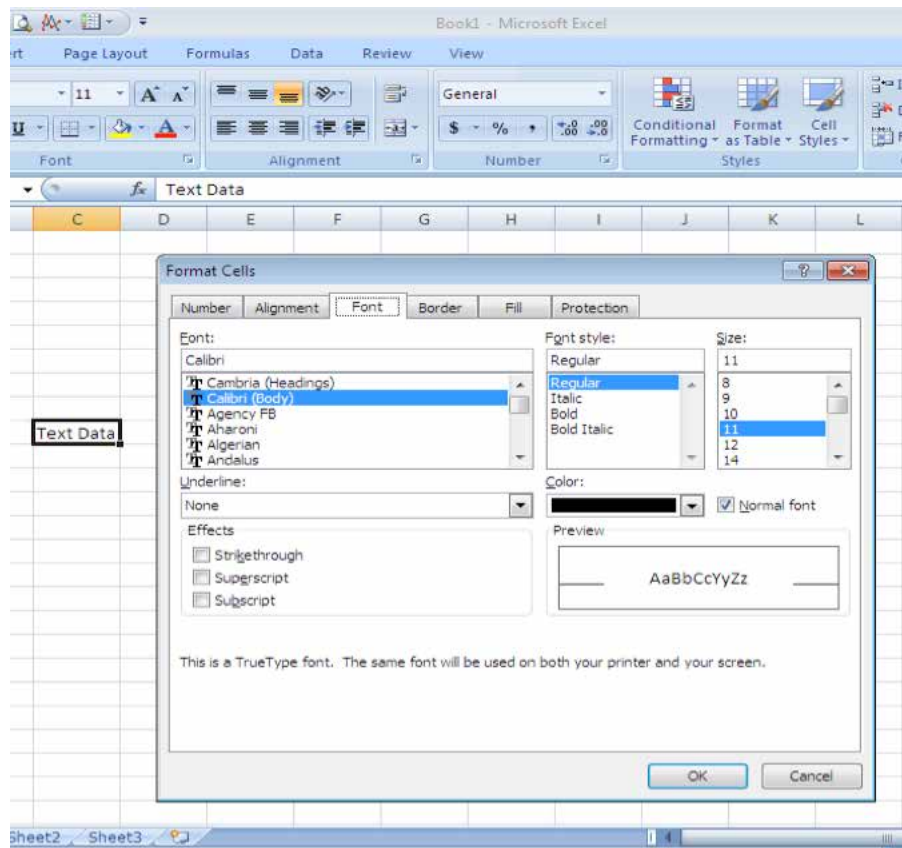
CURRENCY SYMBOL

Under the Symbol dropdown list box the currency used in different countries are available. Select the currency Rs. English (India) to apply Rs to the selected range of cells. The Rupee symbol (₹) can also be inserted.
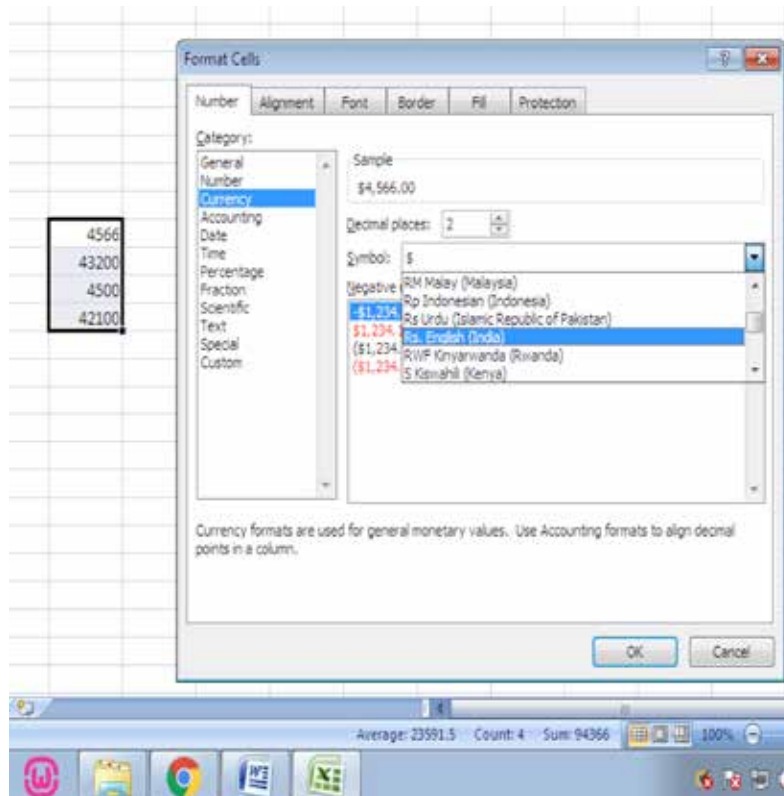
TEXT FORMATTING

Text data in a cell can be formatted by changing the font color, font size, font style etc.

DATE FORMATS

The date format used by Excel is American date format. i.e. mm/dd/yyyy (month/date/year)

To display the date as 08 April 2019 click on a cell C6 and enter 04/08/2019. Press Ctrl +1 or select Format cells dialog box. In the number tab click on the Date option. Select Location as English (India), choose the required date type (14 march 2001) and click OK.

DID YOU KNOW?

Do you know the name of first electronic computer? It is ENIAC (Electronic Numerical Integrator and Computer), introduced in 1946.
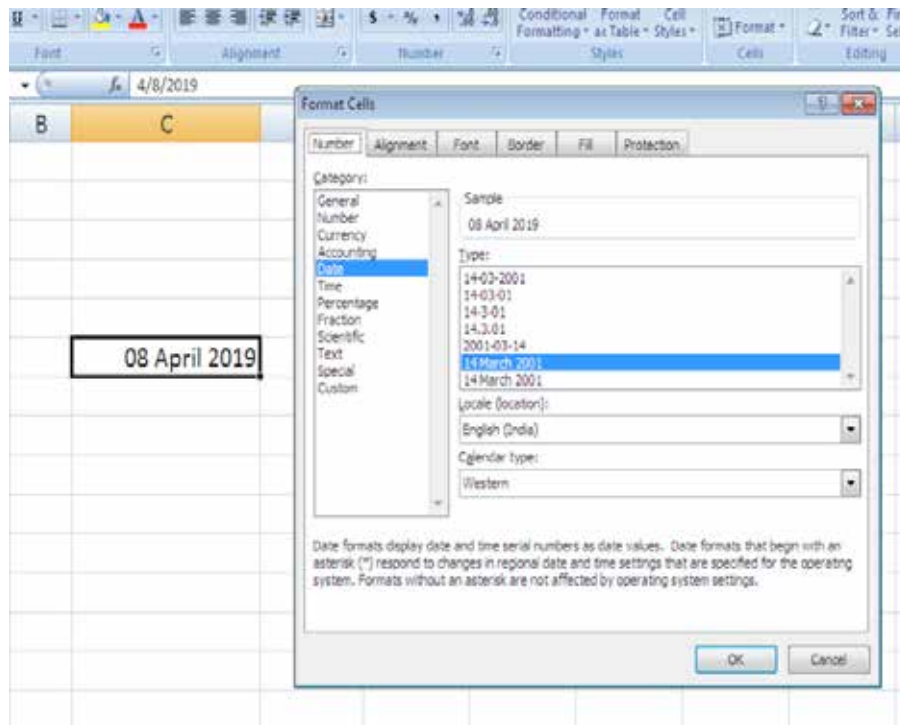
ALIGNMENT

By default, text is left aligned and number and date values are right aligned. Excel provides us with two alignments namely horizontal and vertical alignments. Horizontal alignment is the position of the data with respect to the column width whereas vertical alignment is aligning the text contents with respect to the row height.

Text Orientation can be changed to a specific degree to display text in a slanting position.
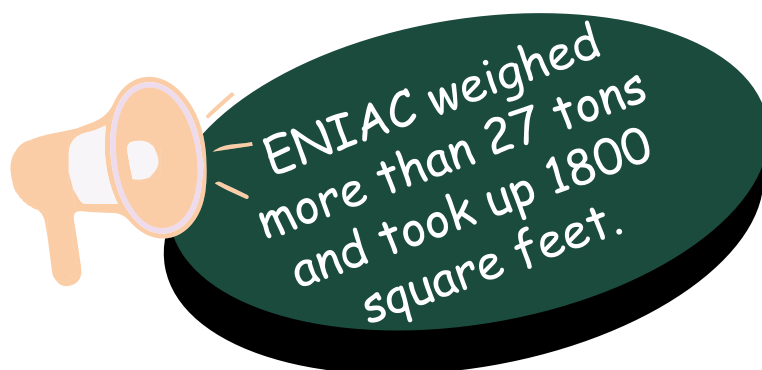
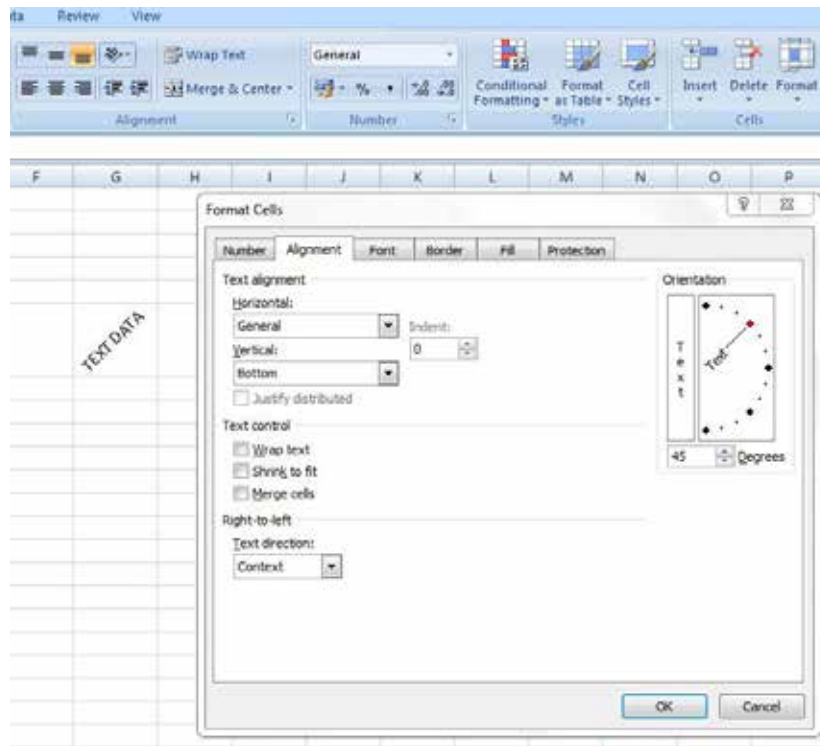|	
Alt + H then A + T – Top alignment	Alt + H then A + L – Left alignment
Alt + H then A + M – Middle alignment	Alt + H then A + C – Center alignment
Alt + H then A + B – Bottom alignment	Alt + H then A + R – Right alignment

ENIAC weighed more than 27 tons and took up 1800 square feet.

WRAP TEXT

Use the Wrap Text button under Text Control to wrap lengthy text in a cell by displaying it on multiple lines within the cell.

SHRINK TO FIT

Enabling Shrink to fit will automatically reduce the font size in a cell so that the text fits without wrapping.

MERGE CELLS

Merge cell is a facility that allows multiple adjacent cells to be combined into a single larger cell. This is done by selecting all cells to be merged and choosing the "Merge Cells" command.

BORDER

The grid lines which appear in the worksheet do not get printed. You can add borders to a cell or a range of cells in your worksheet. Excel allows you to quickly and easily add different types of borders to your individual cells and ranges of cells in your worksheet. You can use a number of different line types for your border. To add borders to cells, follow these steps:

1. Select the cell or range of cells that you want bordered.
2. Select the Cells option from the Format menu. You will see the Format Cells dialog box.
3. Click on the Border tab.
4. Select the Line style, choose a Color, click on Outline for outline border, click inside for border between the cells. (Outline will surround the entire cell or cell range.)
5. Select a line type from the Style area.
6. Click on OK.
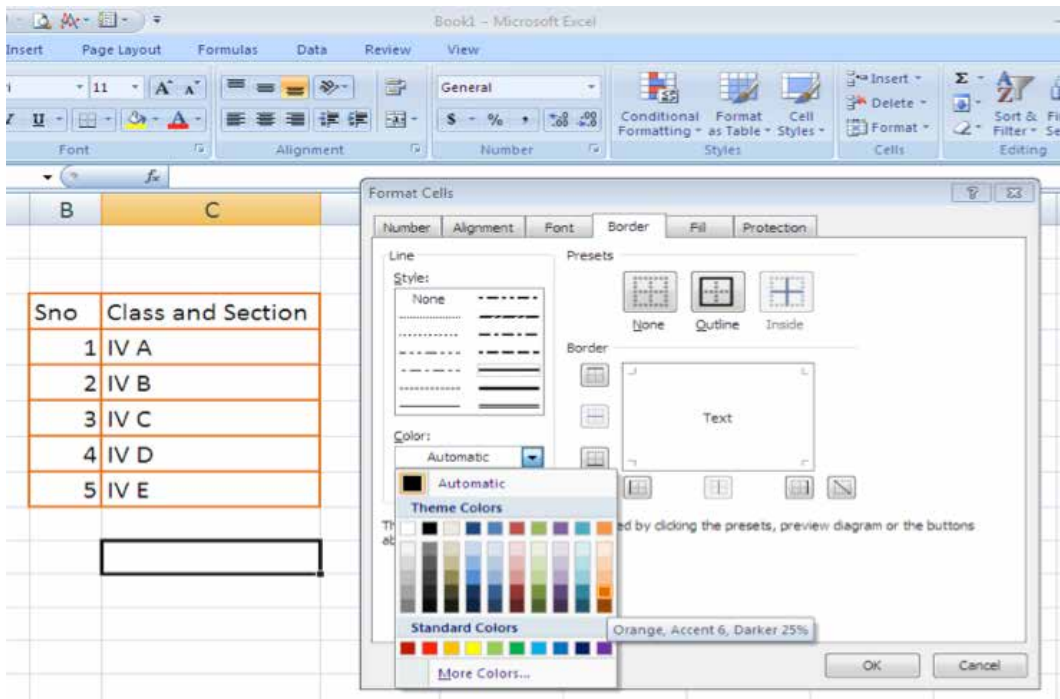
FILL

The fill option is used to change the background color of the cells. Pattern color and pattern style can also be applied.
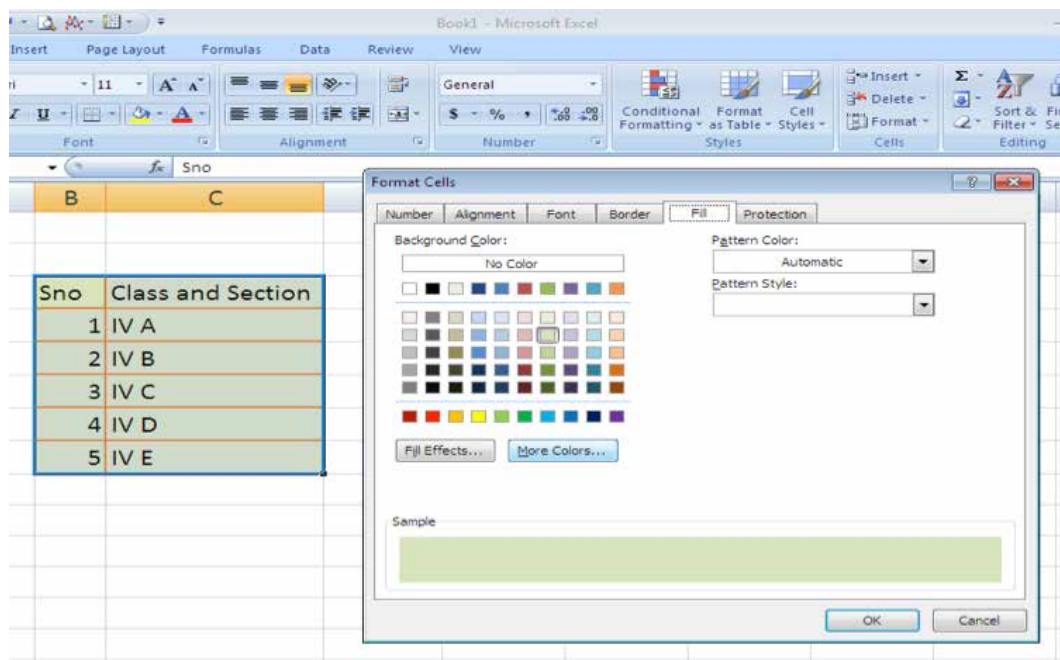
CHANGING THE COLUMN WIDTH AND ROW HEIGHT

By default the column width is 8.43 and row height is 15. To change the column width click on the column name to select and right click. In the menu which appears select column width or row height to specify the numeric value.
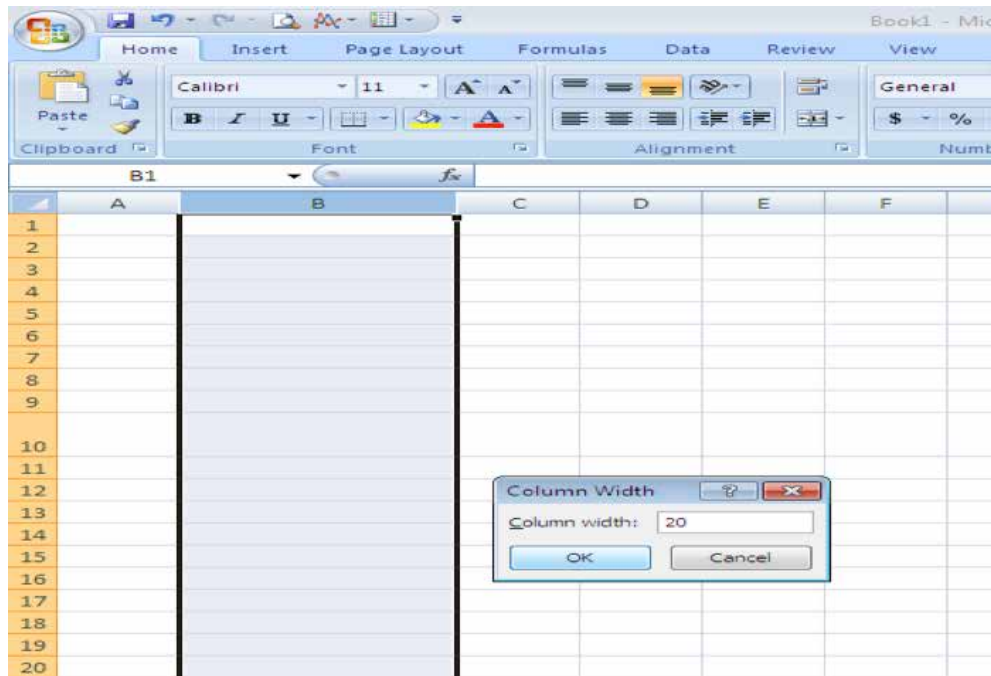
INSERTING COLUMNS AND ROWS

Sometimes there may be a need for us to enter data in an existing worksheet in between. Excel gives the facility to insert blank rows or columns.

TO INSERT A ROW OR A COLUMN

To insert rows, Click on the Home Tab. Click the Insert button and click Insert Sheet Rows Similarly a column can be inserted by clicking the Insert Sheet Column command.

Alternative method:

Right-click the column header to the right of, or the row header below, where you want the new column or row to appear, and then click Insert.

Note:
Before using the command the cell pointer should be positioned at the column where a blank column is to be created.

DELETING COLUMNS AND ROWS

To delete columns or rows

1. Select the rows or columns you want to delete.

2. Right-click the selection, and then click Delete.

3. Choose entire row or entire column to delete a row or a column.
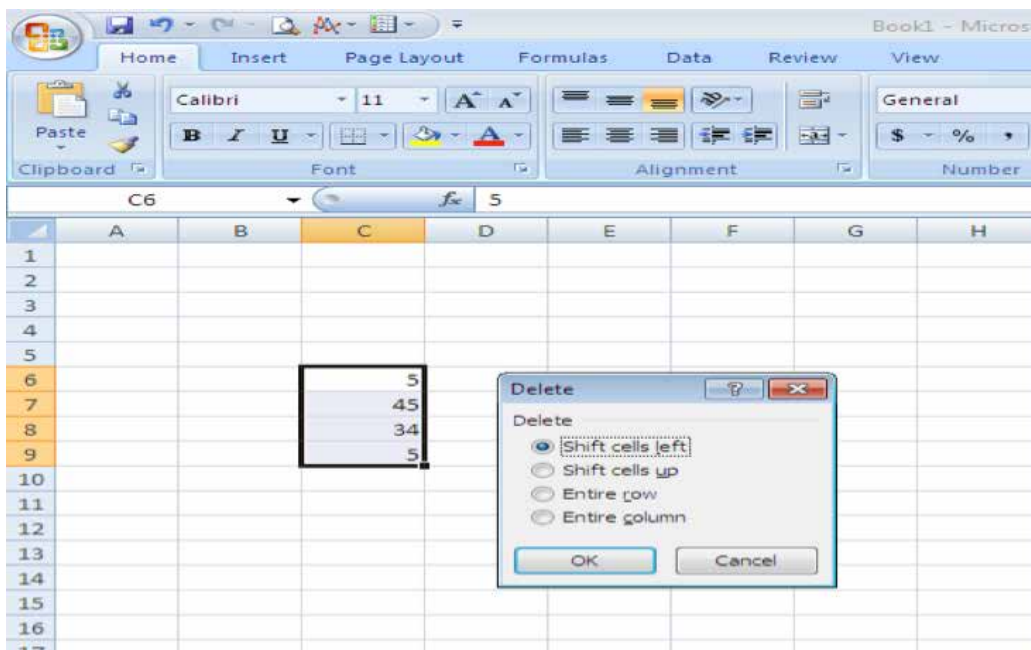
AUTOFILL

AutoFill is a very useful Excel feature that allows you to create entire columns or rows of data which are based on the values from other cells. In other words, Excel compares the selected data and tries to guess the next values that will be inserted. It is used to get months of the year, days of the week, number values to be filled in cells without typing the entire range.

• Type the number 10,20 in cells A1,A2 respectively. Select both the cells and drag using the Fill icon to get other numbers with difference of 10.

• Type January in cell B5 and drag to get the other months of the year.

• Type Wednesday in cell C5 and drag to get the other days of the week.

Activity – 3.1

Create the following data range in sheet 4 of workbook 4A05_act1

Using cell formatting options make the following changes.

- Change 52 to $52
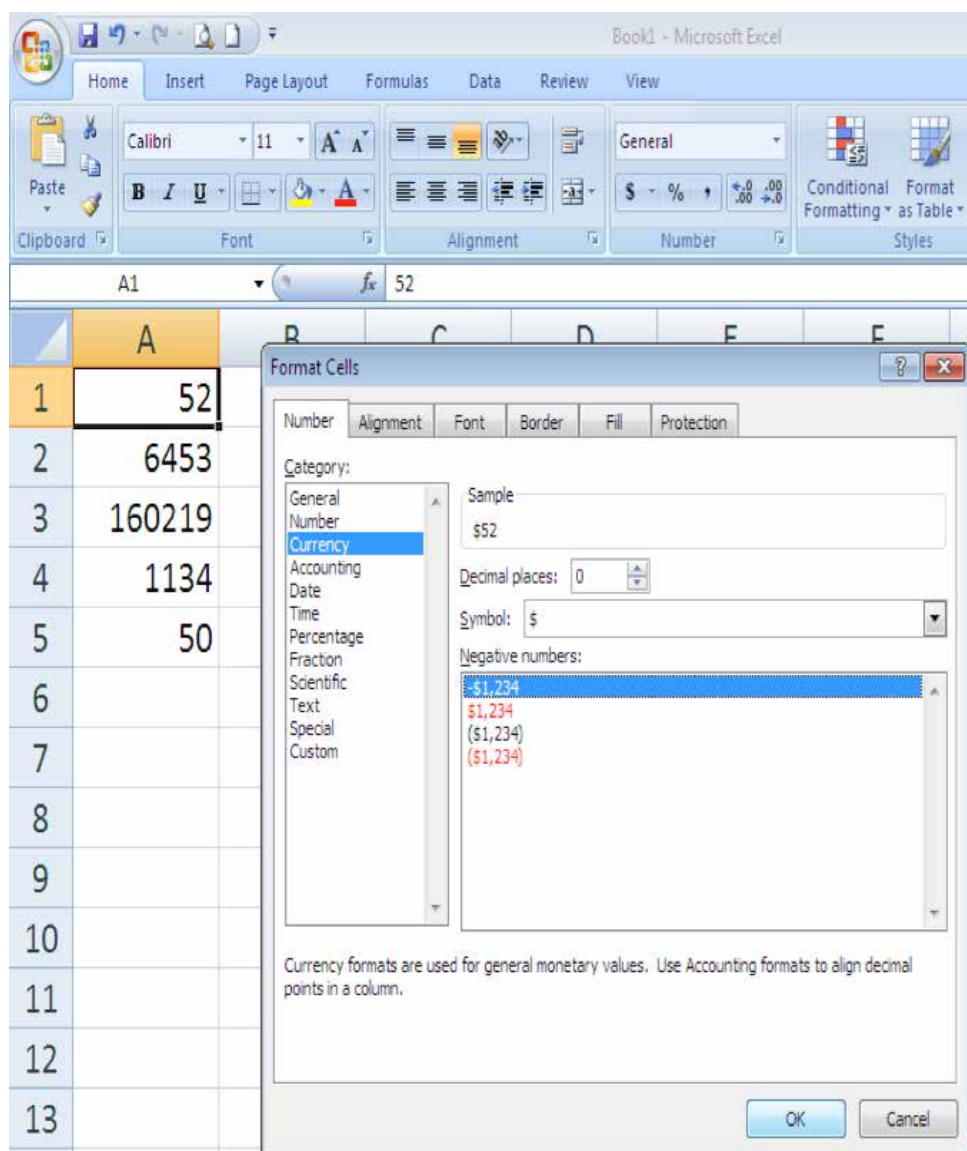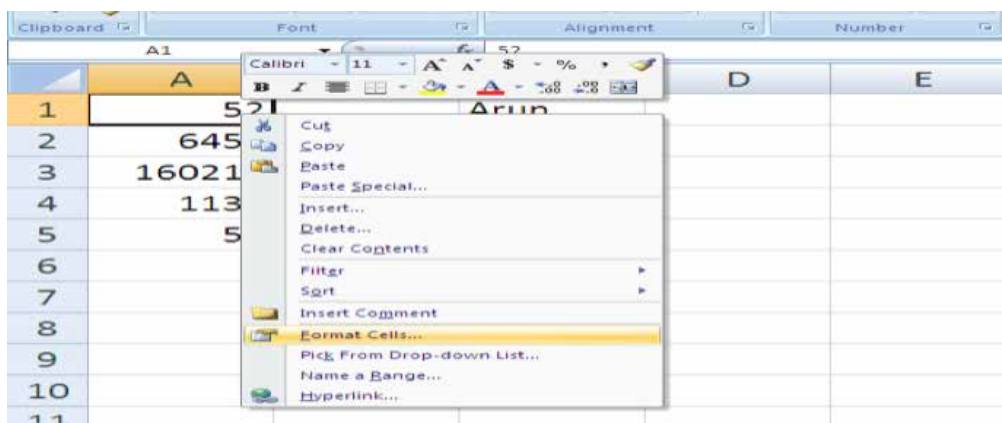
- Change 6453 to a number with two decimal places with comma separator.
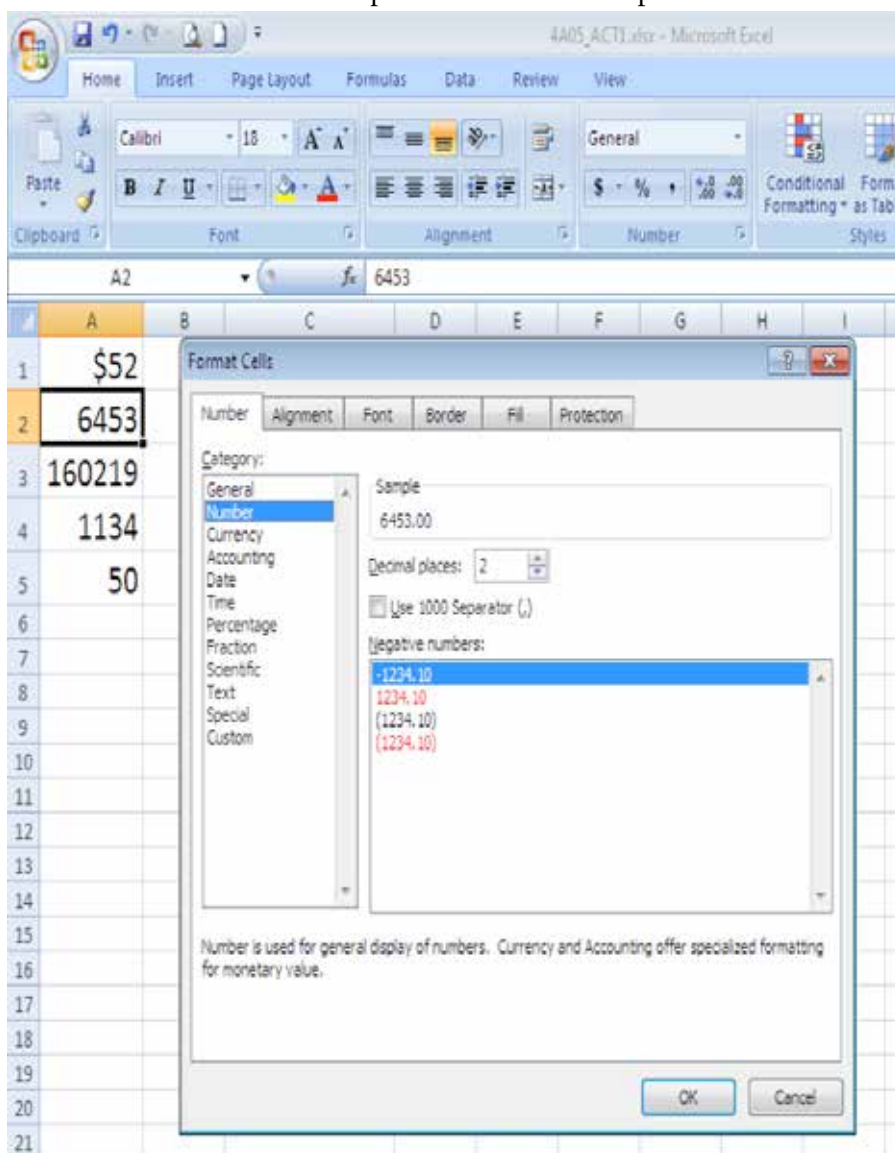
- Display the date as 05 January 2020

Activity - 3.2
- **Change the font color of cells A1 to A4 to red**

    Step 1: Click on cell A1

    Step 2: Select the cells A1 to A4

    Step 3: Right mouse click and select Format Cells

    Step 4: Click on Font Tab in Format cells dialog box

    Step 5: Select Red in Color drop down box

    Step 6: Click OK button.

Activity - 3.3
- **Give a blue border to cells C1 to C5**

    Step 1: Click on cell C1

    Step 2: Select the cells C1 to C5

Step 3: Right mouse click and select Format Cells

Step 4: Click on Border Tab in Format cells dialog box

Step 5: Select Color to Blue, Line Style and Preset to Outline

Step 6: Click OK button.
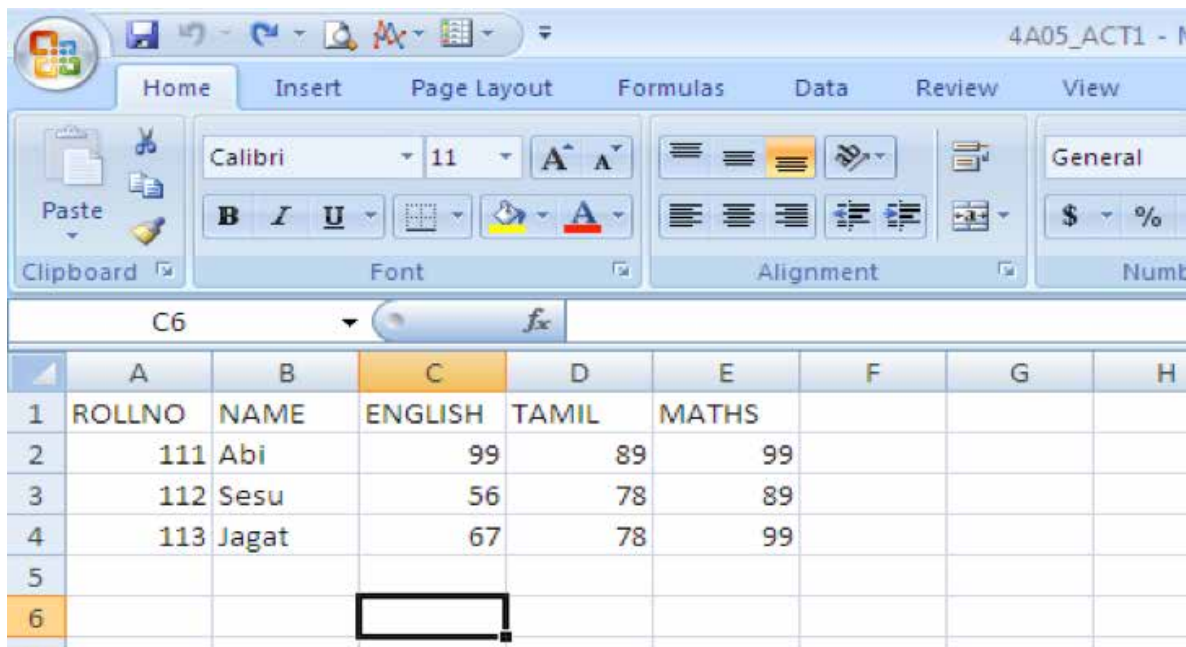
Activity - 3.4

- **Change the font style to Arial, Size 14 to all the data**

    Step 1: Click on cell A1

    Step 2: Select the cells A1 to C5

    Step 3 : Right mouse click and select Format Cells

    Step 4: Click on Font Tab in Format cells dialog box

    Step 5 : Select Font name to Arial , Font size to 14

    Step 6: Click OK button.

Activity- 3.5

Create the following database in sheet 5 of workbook 4A05_act1

I: Insert two more rows between 111 and 112 and one more column between Tamil and Maths.

Step1: Click on cell A3.

Step 2: Select Home tab Select Insert, Insert Sheet Rows

Step 3: Enter details of a student

Step 4: Repeat steps 2 and 3 to add another student details

II: Change the name Jagat to Jagat prabu

Step 1: Click on B6

Step 2: Press F2 and change the name to Jagat Prabhu and press Enter key

III: Change the Tamil marks of Sesu to 87

Step 1: Click on the cell which has 78

Step 2: Change the mark to 87 and press enter key

IV: Change the font color to red

Step 1: Select all cells from A1 to E6

Step 2: Right mouse button click select Format cells and choose Font tab.

Step 3: Change the font color to Red

V: Increase the B column width to 13 and the row height of all rows to 20

Step 1: Click on the Column title B

Step 2: Right mouse click and select Column width and change it to 13 and click OK

Step 3: Select all rows 1 to 6

Step 4: Right mouse click and select Row Height and change it to 20 and click OK

VI: Give different background color for each row

Step 1: Select row 2 cells A2 to E2

Step 2: Right mouse click and select Format cells and select Fill tab

Step 3: Select a background color and choose OK

Step 4: Repeat Steps 1 to 3 to change the row colors of all records

VII: Give all borders to cells A1 to E6

Step 1: Select cells A1 to E6

Step 2: Right mouse click and select Border tab

Step 3: Select Inside option and click OK.

ROLLNO	NAME	ENGLISH	TAMIL	MATHS
111	Abi	99	89	99
105	Ramya	56	66	45
106	Seetha	45	67	78
112	Sesu	56	87	89
113	Jagat Prabhu	67	78	99

Activity 3.6

Using AutoFill display the months of the year, days of the week and multiplication table of numbers 7 and 12 as shown below

B	E	F	G	H	I
January	7	X	1	=	7
February	7	X	2	=	14
March	7	X	3	=	21
April	7	X	4	=	28
May	7	X	5	=	35
June	7	X	6	=	42
July	7	X	7	=	49
August	7	X	8	=	56
September	7	X	9	=	63
October	7	X	10	=	70
November					
December					
	12	X	1	=	12
	12	X	2	=	24
Monday	12	X	3	=	36
Tuesday	12	X	4	=	48
Wednesday	12	X	5	=	60
Thursday	12	X	6	=	72
Friday	12	X	7	=	84
Saturday	12	X	8	=	96
Sunday	12	X	9	=	108
	12	X	10	=	120

❧ BRAIN DEVELOPER ❧

1. The two basic alignment options available in Excel are _____ and _____.

2. _____ Option is used to combine contents of many cells into one.

3. The Date values entered in a cell are _____ aligned by default.

4. The normal, bold, italics options are available under _____ option in the Font tab.

5. The two modes in which a worksheet appears are _____ and _____.

6. The _____box is used to place commas in a number value as per American number system.

7. The _____ facility allows displaying the contents of a cell in many lines.

8. The Shrink to Fit option automatically reduces the _____in a cell so that the text fits in the cell.

9. There are _____tabs in Format cells dialog box.

10. The _____ option is used to change the background colour of the cells.

11. _____ is the key combination to select the entire worksheet.

12. Multiple adjacent cells can be combined into a single larger cell with the _____ facility.

13. If 4/6 is entered in a cell without applying any format then excel will treat this as a _____ value.

14. The Wrap Text option is available under _____ tab in format cells window.

15. To insert rows, Click on The Home tab, choose Insert and use _____ command.

Teacher's Signature

MS- EXCEL FORMULAE AND FUNCTIONS

FORMULA

One the most important aspects of Excel is its ability to perform calculations using a formula or function. A formula is an expression which calculates the value of a cell. A formula starts with an equal to (=) symbol.

Formulas are instructions given by the user to perform arithmetic calculations whereas Functions are predefined formulae and are already available in Excel.

ELEMENTS OF A FORMULA

A formula is a combination of equal to sign, numbers, cell address and one or more operators.

- + (plus sign) for addition

- – (minus sign or hyphen) for subtraction

- * (asterisk) for multiplication

- / (slash) for division

ENTERING A FORMULA

Steps to create a formula

1. Click the cell into which you want to enter a formula.

2. Type =.

3. Type the expression representing the calculation you want to perform.

4. Press the Enter Key or click on an empty cell.

To enter a formula, execute the following steps.

1. Enter 5 and 3 in cells D1 and D2 respectively – Click on the cell D3.

2. To let Excel know that you want to enter a formula, type an equal sign (=).

3. For example, type the formula D1+ D2.
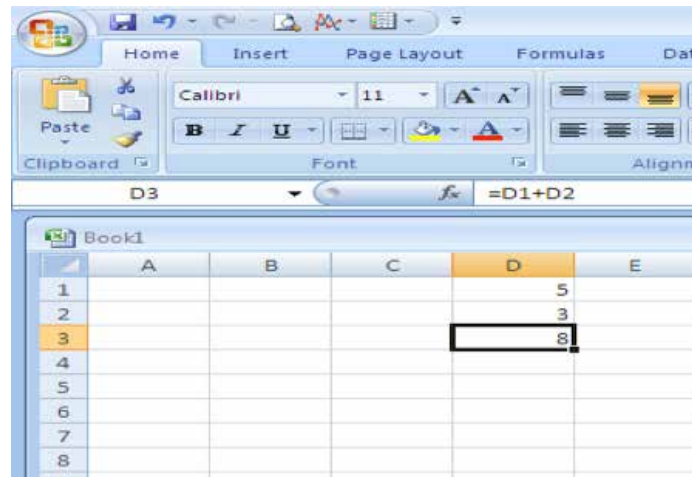
When the value in a cell is changed, Excel automatically recalculates the answer of the formula. This happens only when the formula is entered with cell address.

Formula with cell value

 = 5 + 3

Formula with cell address

= D1 + D2

CHANGING A FORMULA

To edit a formula, click in the formula bar and change the formula. Alternatively you can double click on the cell and change the formula.

USING THE AUTO SUM

If you need to sum a column or row of numbers, let **Excel** do the math for you. Select a cell next to the numbers you want to sum, click **AutoSum** on the Home tab, press Enter, and you're done. When you click **AutoSum, Excel** automatically enters a formula (that uses the SUM function) to sum the numbers.

#VALUE is Excel's way of saying, "There's something wrong with the way your formula is typed.

| C8 | | | × | ✓ | f_x | =C5+C6 | | |

How to fix the #VALUE? error

Item	Cost
Coffee	na
French toast	$4.50

Total ⚠ #VALUE!

Item	Cost
Coffee	$1.50
French toast	$4.50

Total $6.00

The text "na" in C5 is not a number

F5 is a number, so same formula works fine
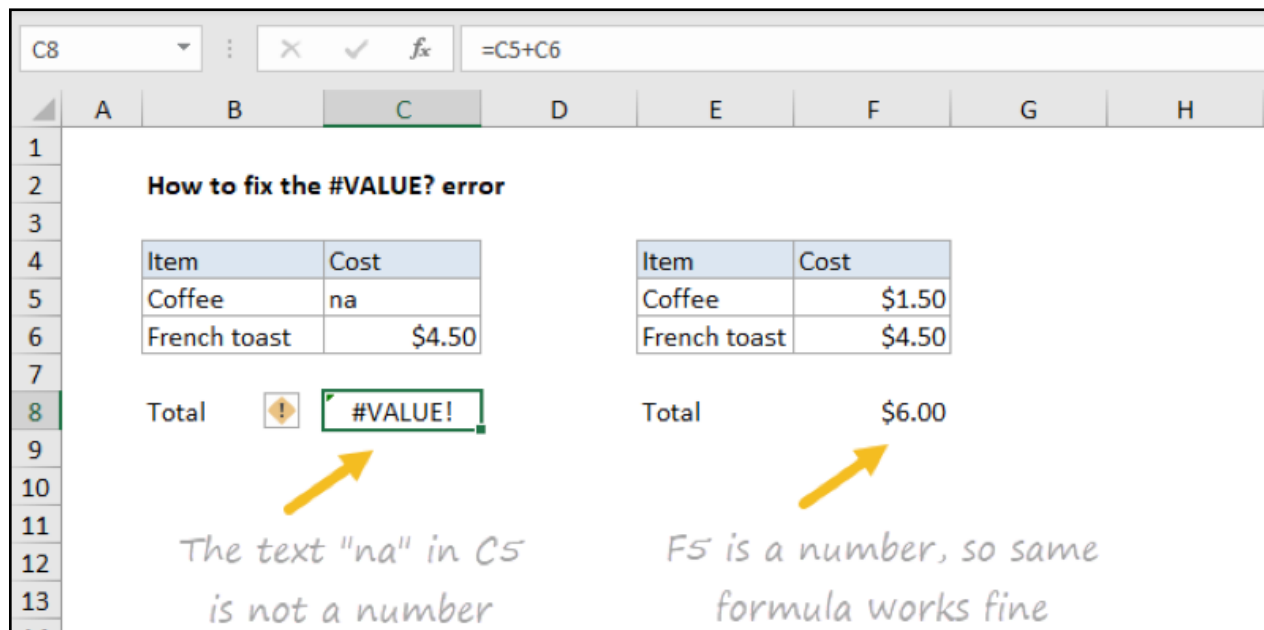
How to correct a formula error in Excel ?

Click the cell where you want to correct the formula. Now, you will see the existing formula in the formula bar that is available in the top of the Excel screen, just below the tool bar. Double click the formula bar and edit the formula as desired.

Functions are predefined formulae in Excel that performs both simple and complex calculations.

Functions accept arguments and return value

All functions should start with an equal to sign (=) .

Function name is followed by opening bracket, list of arguments and closing bracket.

Sum function is used to find the total of a set of number values or range of cells.

Examples:

= Sum(34,2,1)	Returns the total of 34,2 and 1 (37)
= Sum(A2,A4,A6)	Returns the sum of cells A2 , A4 and A6
= Sum(A1,A2,A3,A4,A5) or	Returns the sum of all numbers present in A1,A2,A3,A4,A5
= Sum(A1 : A5)	

MAX FUNCTION

The **Excel MAX** function returns the largest value from a supplied set of numeric values.

= MAX (300,200,700)	Returns the largest value (700)
= MAX (B1, B3, B4)	Returns the largest from the cells B1, B3 and B4
= MAX (B1, B2, B3, B4, B5) or	Returns the largest of all numbers present in B1, B2 , B3 , B4, B5
= MAX (B1 : B5)	

Min Function: Returns the smallest of a set of numeric values. The arguments are given similar to MAX function.

When a Cell which is empty is used in an arithmetic formula it is taken as value 0

Activity – 4.1

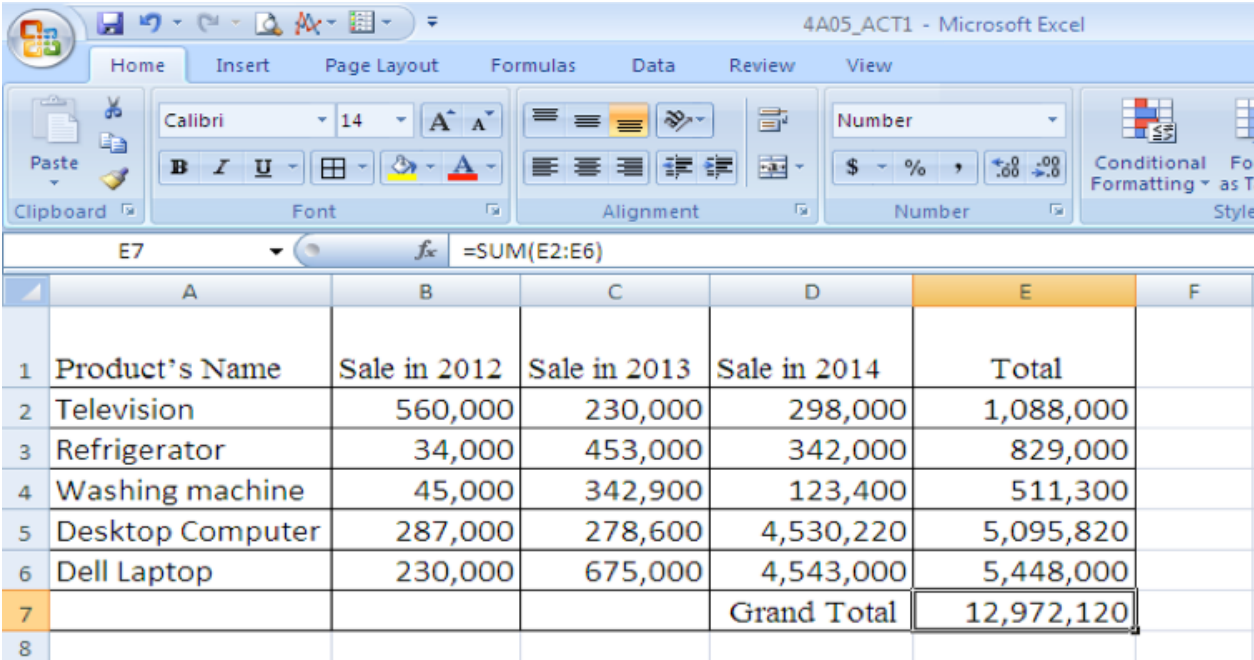Create the following format in sheet 6 of workbook 4A05_act1

Product's Name	Sale in 2012	Sale in 2013	Sale in 2014	Total

Step 1: Enter 3 entries for the above table. You may enter details of any product like eatables, computer parts, soft drinks, toys etc. Then perform the following tasks on the worksheet.

Step 2: Enter two more entries and save them.

Step 3: Find the total sales for each product using formulae.

Step 4: Also display the grand total which displays all product total of all three years. The file after entry should be as below.
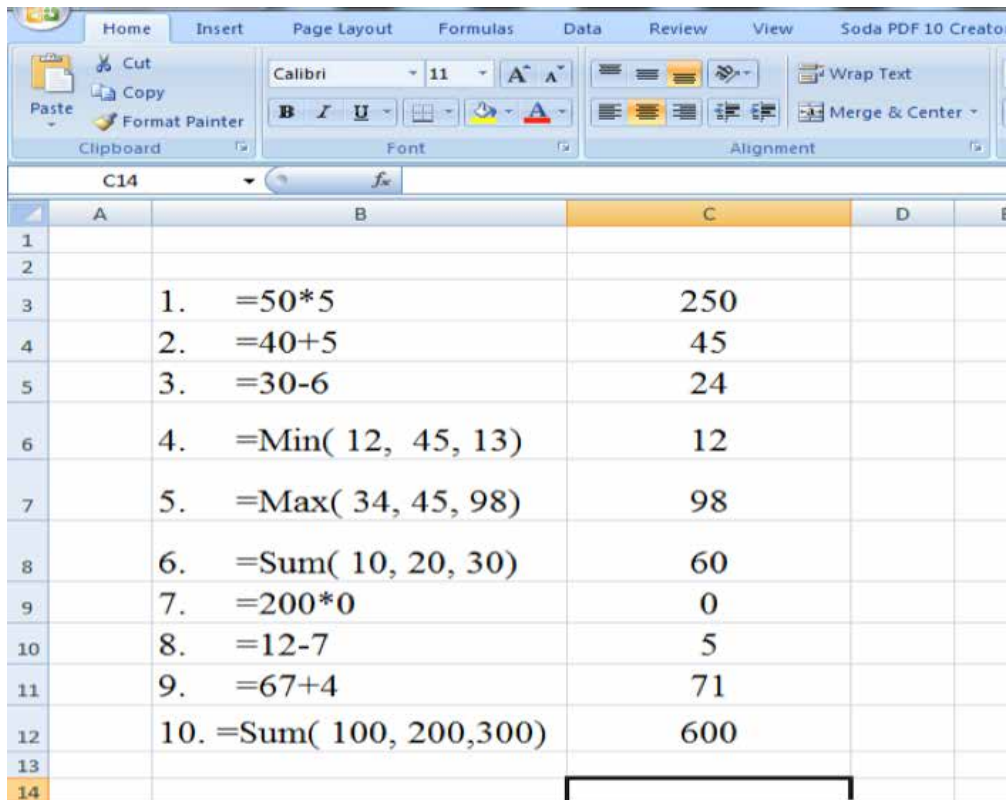

HINTS:

✸ In cell E2 enter the formula =B2+C2+D2 and drag till E6 to get other values.

✸ Use Auto sum to get grand total or go to E7 and enter =sum (E2..E6)

Activity- 4.2

Use sheet 7 of workbook 4A05_act1 to find the output for the following after typing in the worksheet.
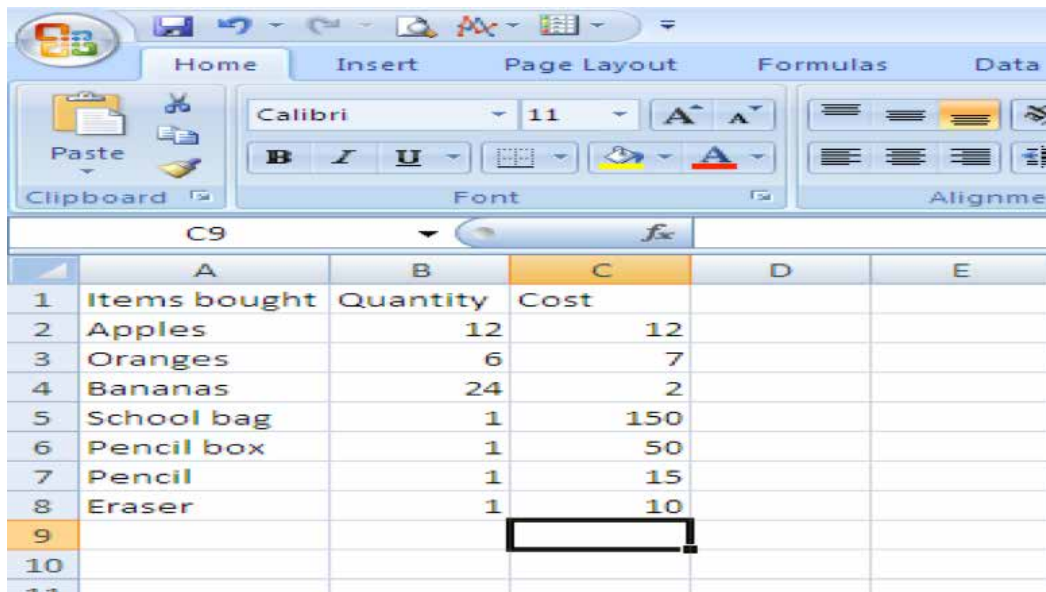
1.   =50*5

2.   =40+5

3.   =30-6

4.   =Min(12, 45, 13)

5.   =Max(34, 45, 98)

6.   =Sum(10, 20, 30)

7.   =200*0

8.   =12-7

9.   =67+4

10.   =Sum(100, 200,300)

	A	B	C	D	E
1					
2					
3		1. =50*5	250		
4		2. =40+5	45		
5		3. =30-6	24		
6		4. =Min(12, 45, 13)	12		
7		5. =Max(34, 45, 98)	98		
8		6. =Sum(10, 20, 30)	60		
9		7. =200*0	0		
10		8. =12-7	5		
11		9. =67+4	71		
12		10. =Sum(100, 200,300)	600		
13					
14					

Activity-4.3

Create the following data in sheet 8 of workbook 4A05_act1

Now perform the following operations

Step 1: Find the number of items bought

Step 2: Find the minimum cost

Step 3: Find the maximum cost

Step 4: Find and display the amount which is quantity * cost

Step 5: Find the total cost of the items.

Use Formulae to find Amount, Minimum cost, Maximum cost, Items bought and Total cost of items.

Did You Know

Android is a mobile operating system primarily designed for touchscreen devices like smart phones and tablets.

The worksheet after the steps should be as below:-

	A	B	C	D	E	F
1	Items bought	Quantity	Cost	Amount		
2	Apples	12	12	144		
3	Oranges	6	7	42		
4	Bananas	24	2	48		
5	School Bag	1	150	150		
6	Pencil box	1	50	50		
7	Sketch Pen	1	15	15		
8	Eraser	1	10	10		
9	Items bought	46				
10	Minimum cost		2			
11	Maximum cost		150			
12	Total cost of Items			459		
13						
14						
15						
16						
17						

D12 = =SUM(D2:D8)

DID YOU KNOW?

Android was developed by Google in 2008.

❧ BRAIN DEVELOPER ❧

I) FILL IN THE BLANKS

1.   Formula in Excel should begin with _____.

2.   Formulae are used to perform _____.

3.   When you enter a formula in a cell the answer is displayed in the _____.

4.   When a cell contains a formula the same appears in the _____.

5.   To find the total of a set of numbers the _____ function is used.

6.   The Max function gives the _____ value in a given set of data.

7.   We can use the Min function only on _____ data.

8.   We cannot perform the _____ mathematical operation with zero.

9.   The 4 basic arithmetic operators used in Excel are __ , ____ , ____ and ____.

10.   Always enter the formula with cell _____, so that when the data changes the answer automatically changes.

11.   = 67+*34-3 formula gives the result as _____.

12.   The Auto sum tool is on the _____ tab.

II) IDENTIFY AND LIST THE CELL ADDRESS, OPERATORS, AND CONSTANTS IN THE BELOW FORMULA

= A4 + B4 * 2 + C4 – D4 + E4*50 –F4/ 3

Cell Address	
Constant value	
Mathematical Operator	

III) MATCH THE FOLLOWING

1.	= 10+2+4-1	a.	10
2.	= 10-2*3	b.	500
3.	= MIN(10,20,15)	c.	12
4.	= MAX(12,500,50)	d.	15
5.	= 144 / 12	e.	4
6.	Sum of all numbers in the cells A1 to A10	f.	Product of two numbers in A3 and A4
7.	#VALUE	g.	Answer changes when values are changed
8.	Alt + Equal to sign	h.	=Sum (A1: A10)
9.	= A3* A4	i.	Auto Sum
10.	Formula entered with cell address.	j.	Error in formula

Teacher's Signature

User Skill
Typing Tutor

TYPING TUTOR INTRODUCTION

➢ The knowledge of touch typing has become inevitable today in the use of computers.

➢ With typing tutor, you can learn touch typing in an easier and simple way.

➢ It is very similar to you that there are 26 letters in English alphabet. All these 26 letters are presented in the computer keyboard too.

➢ But, 26 letters are not arranged in an alphabetical order.

➢ The letters in the keyboard is arranged in QWERTY order.
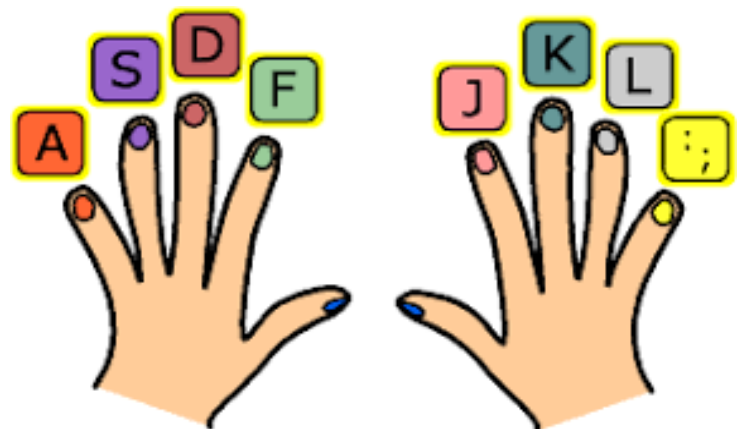

TYPING STEPS:

Follow the steps below:-

**Step 1:** First of all place your hand on the keyboard.

Step 2: Place your

➢ Little finger of your left hand gently on the 'A'

➢ Ring finger on ' S '

➢ Middle finger on ' D '

➢ Index finger for both ' F ' and ' G '

Step 3: Place your

➢ Little finger of your right hand gently on the key semicolon ' ; '

➢ Ring finger on ' L '

➢ Middle finger on ' K '
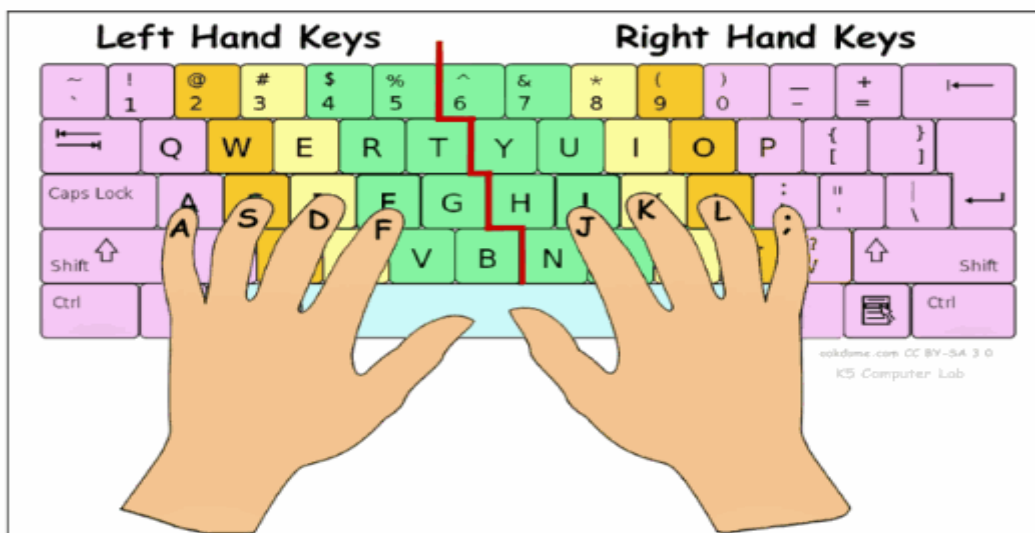
➢ Index finger for both ' H ' and ' J '

FINGER POSITION ON THE KEYBOARD

EVERY FINGER HAS A JOB!

FOLLOW THIS GUIDE ONLY LET THESE FINGERS TYPE ON THESE KEYS
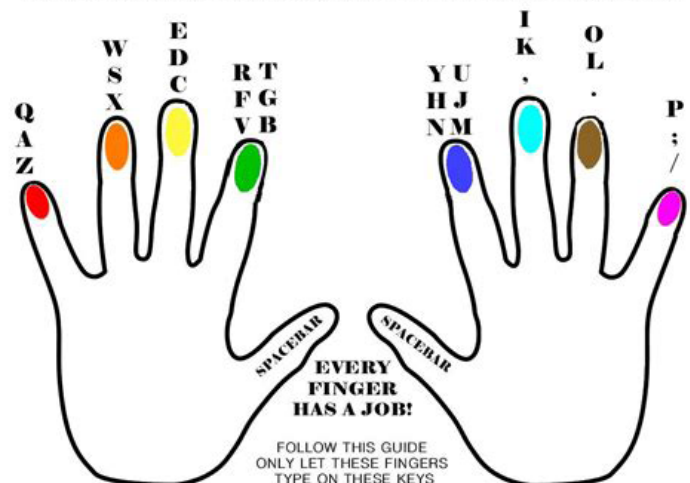
Step 4: Place both your left and right thumbs on the spacebar key.

Proper Finger Placement on the Keyboard

Lets start typing. Whatever it may be letter or numbers all most all the keys you can see around your fingers.

LEFT HAND FINGER

Name of the Finger	Keys on the Keyboard
Little Finger	A
Ring Finger	S
Middle Finger	D
Index Finger	F,G
Thumb	Spacebar

RIGHT HAND FINGER

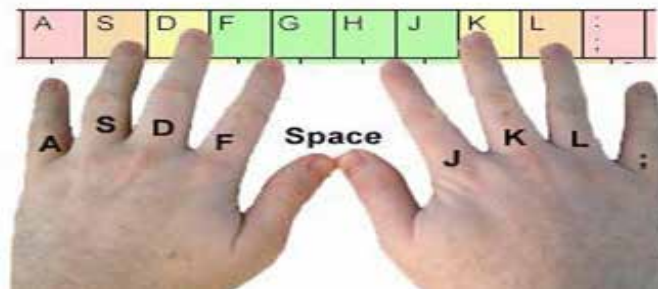| Name of the Finger	Keys on the Keyboard
Little Finger	;
Ring Finger	L
Middle Finger	K
Index Finger	J,H
Thumb	Spacebar

THE QWERTY LAYOUT

The keys on the keyboard is arranged in QWERTY layout. The layout is referred to us as "QWERTY" because of the arrangement of the keys in the upper row is QWERTY.

HOME ROW

Keyboard finger position

The finger of an experienced typist never "rest" However, if we could ask the fingers where they spend most of their time, it is over the home row.

When you are still learning to access keyboard, be careful to keep at least one finger of each hand anchored over the home row.

UPPER ROW / QWERTY ROW

QWERTY Row is located just above the Home row. It contains many number of characters.

LOWER ROW

Lower Row is located just below the home row, contains limited number of keys.

NUMBERS ROW

Numbers Row is located above the upper row, number keys are also available in a separate place at the right side of the keyboard.

ANCHORING

Anchoring means to keep a finger in very light contact with its home row key.

During the early stages of learning keyboard, this is necessary for the brain to develop a sense of position for the hands and fingers.

As you become a more skilled typist, your fingers will automatically move to the correct position of the keys.