MS EXCEL

A spreadsheet is essentially a matrix of rows and columns. Consider a sheet of paper on which horizontal and vertical lines are drawn to yield a rectangular grid. The grid namely a cell, is the result of the intersection of a row with a column. Such a structure is called a **Spreadsheet**.

A spreadsheet package contains electronic equivalent of a pen, an eraser and large sheet of paper with vertical and horizontal lines to give rows and columns. The cursor position uniquely shown in dark mode indicates where the pen is currently pointing. We can enter text or numbers at any position on the worksheet. We can enter a formula in a cell where we want to perform a calculation and results are to be displayed. A powerful recalculation facility jumps into action each time we update the cell contents with new data.

MS-Excel is the most powerful spreadsheet package brought by Microsoft. The three main components of this package are

- Electronic spreadsheet
- Database management
- Generation of Charts.

Each workbook provides 3 worksheets with facility to increase the number of sheets. Each sheet provides 256 columns and 65536 rows to work with. Though the spreadsheet packages were originally designed for accountants, they have become popular with almost everyone working with figures. Sales executives, book-keepers, officers, students, research scholars, investors bankers etc, almost any one find some form of application for it.

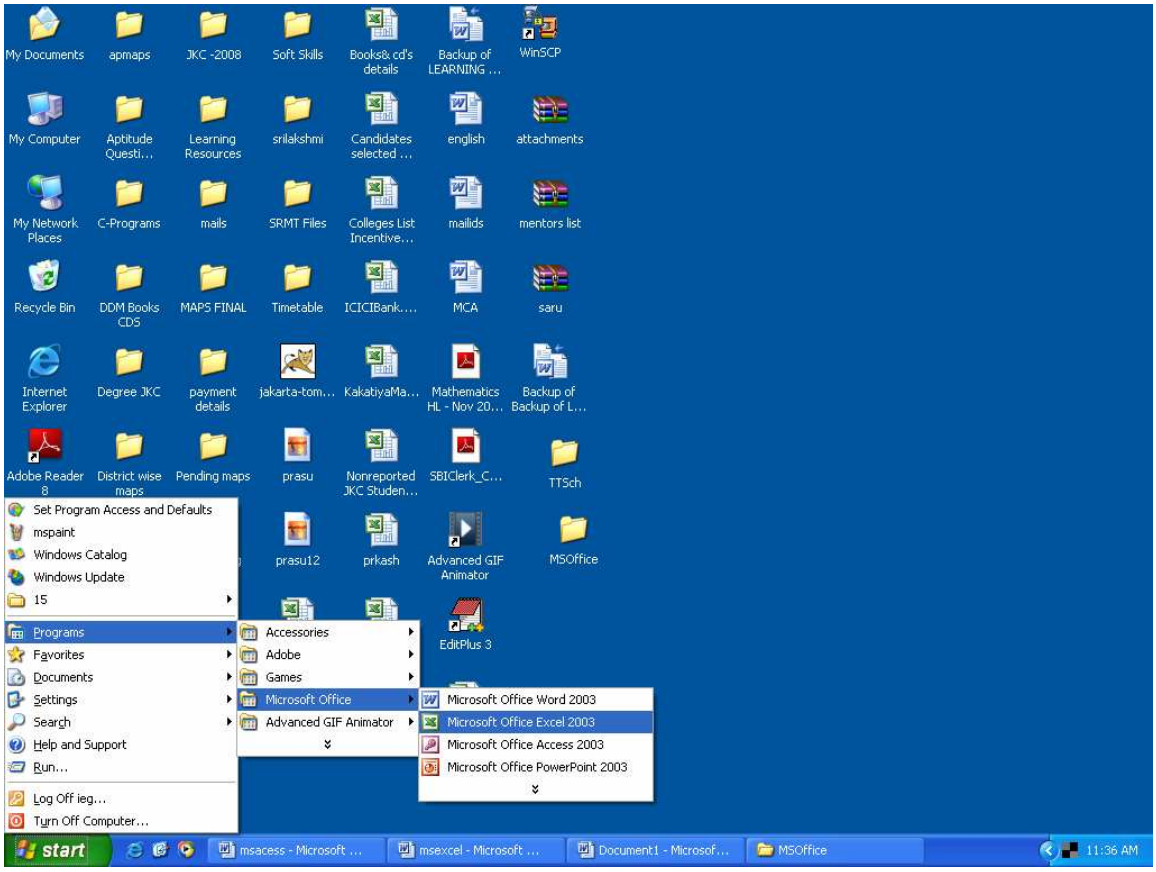
You will learn the following features at the end of this section.

- Starting Excel 2003
- Using Help
- Workbook Management
- Cursor Management
- Manipulating Data
- Using Formulae and Functions
- Formatting Spreadsheet
- Printing and Layout
- Creating Charts and Graphs

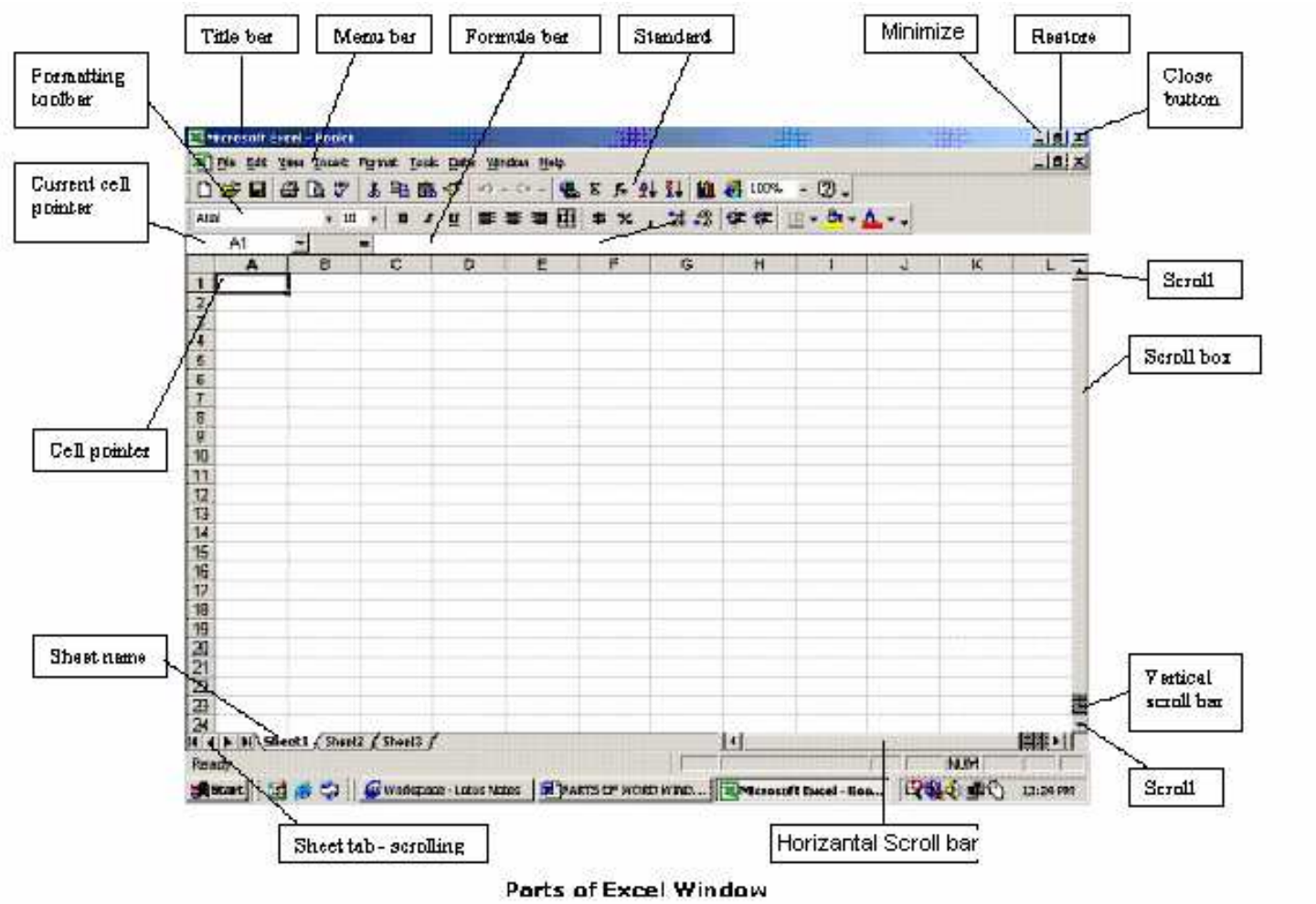
Starting Excel 2003

- Switch on your computer and click on the **Start** button at the bottom left of the screen.

- Move the mouse pointer to **Programs**, then across to **Microsoft Excel**, then click on **Excel** as shown in this screen.



- When you open Excel a screen similar to this will appear



Parts of Excel Window

❖ The options shown below is called as **Menu Bar**

File Edit View Insert Format Tools Data Window Help

❖ The collection of icons for common operations shown below is called as **Standard Tool Bar**

TOOLBARS AND THE ICONS

Standard Toolbar

New
Creates a new blank file.
Alternative: File → New
Shortcut → Ctrl + N

Open
Opens or finds a file.
Alternative: File → Open
Shortcut → Ctrl + O

Save
Saves the active file.
Alternative: File → Save
Shortcut → Ctrl + S

E-Mail
Sends contents of the current worksheet as body of the e-mail message

Print
Prints the active file using current defaults.
Alternative: File → Print
Shortcut → Ctrl + P

Print Preview
Displays full pages as they are printed.
Alternative: File → Print Preview
Shortcut → Ctrl + F2

Spelling
Checks the spelling in the active file.
Alternative: Tools → Spelling and Grammer
Shortcut → F7

Cut
Cuts the selection and puts it on the Clipboard.
Alternative: Edit → Cut
Shortcut → Ctrl + X

Past
Inserts the Clipboard contents at the insertion point.
Alternative: Edit → Past
Shortcut → Ctrl + V

Copy
Copies the selection and puts it on the clipboard.
Alternative: Edit → Copy
Shortcut → Ctrl + C

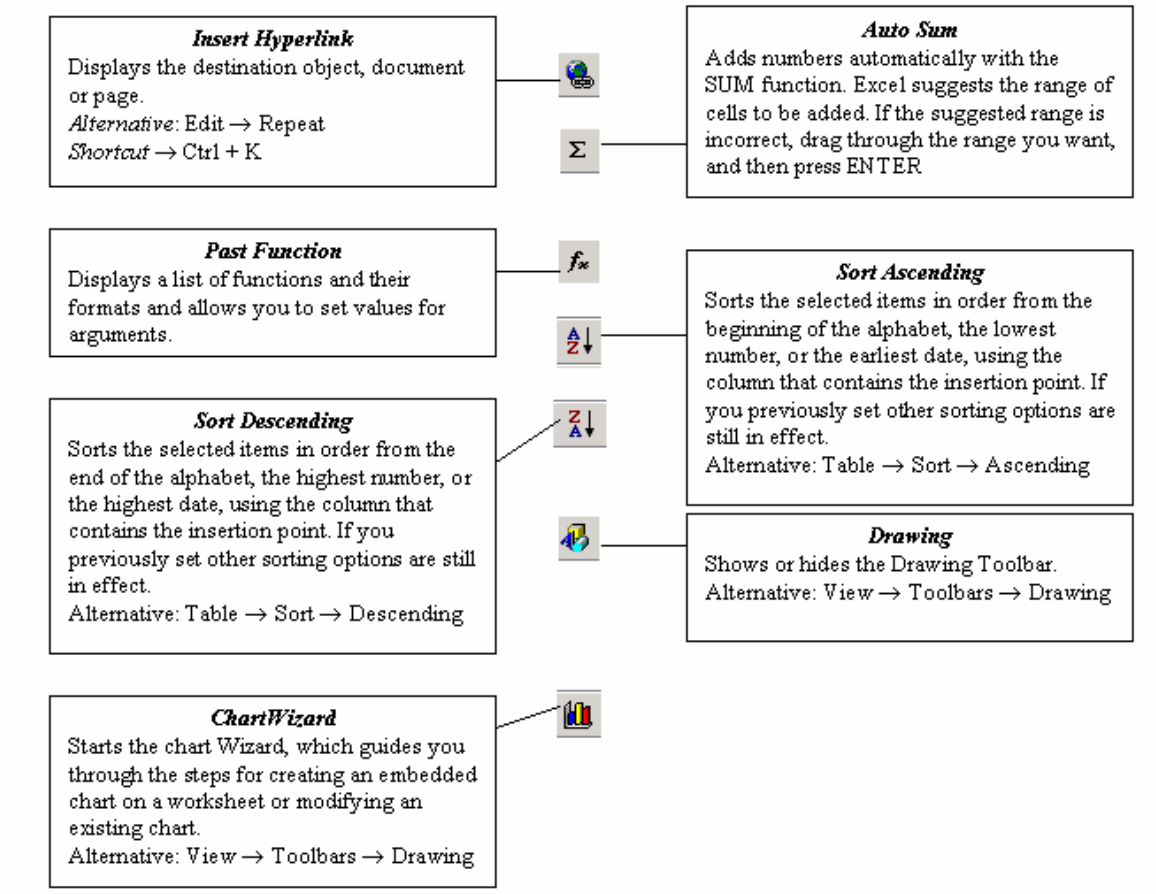
Format Painter
Copies the formatting of the selection to a specified location.
Shortcut → Ctrl + Shift + C

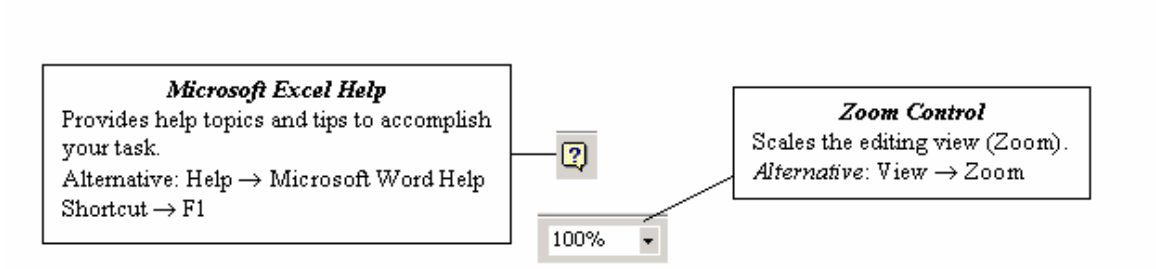
Undo
Reverses certain commands.
Alternative: Edit → Undo
Shortcut → Ctrl + Z

Redo
Reverses the action of the Undo command.
Alternative: Edit → Repeat
Shortcut → Ctrl + Y

Insert Hyperlink
Displays the destination object, document or page.
Alternative: Edit → Repeat
Shortcut → Ctrl + K

Auto Sum
Adds numbers automatically with the SUM function. Excel suggests the range of cells to be added. If the suggested range is incorrect, drag through the range you want, and then press ENTER





- The **formula bar** is the place in which you enter the formula(=A3*B5)

- The alphabets **A,B...** are known as **columns**

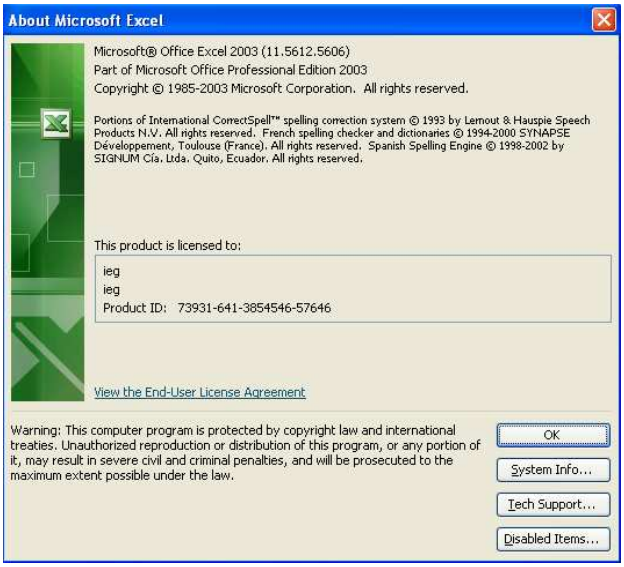
- This is the name of the workbook. (**Book1**)

- The rows are numbered as **1,2,3…**

- **Sheet1,Sheet2, Sheet3** are known as **worksheet tabs**

How to use Help Menu

- Click on **Help**, **Contents and Index**, then click on the **Index** tab. The following screen will appear

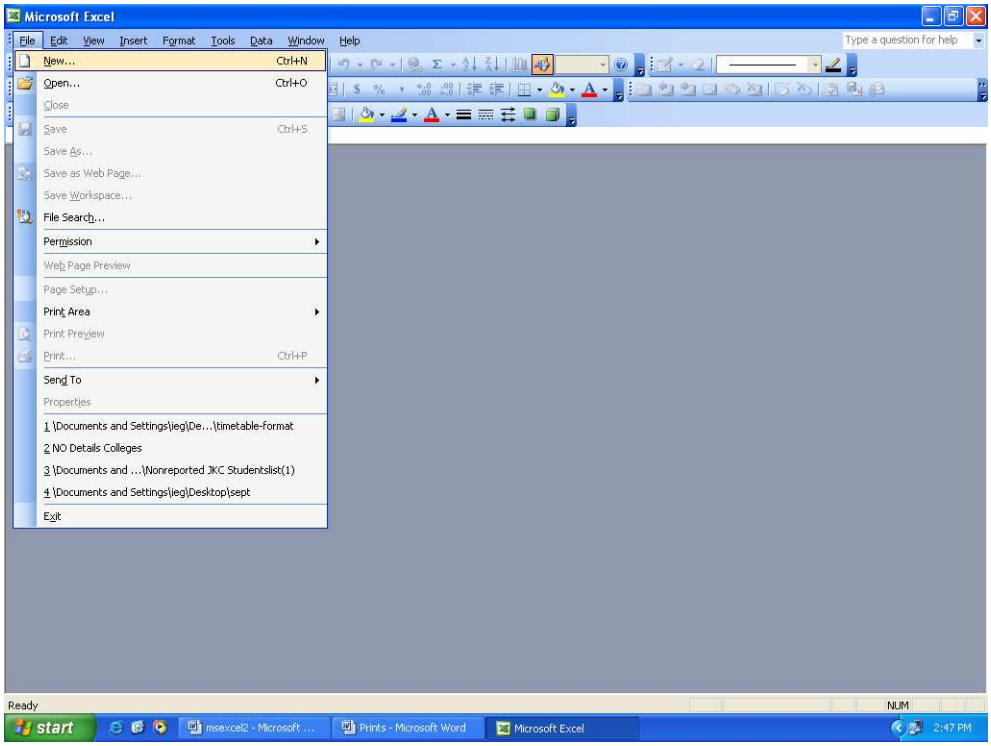


- Type the first few letters to see the help entries for those letters.
- You can get the printout of any help topic by selecting it, right clicking and then clicking **Print Topic**.

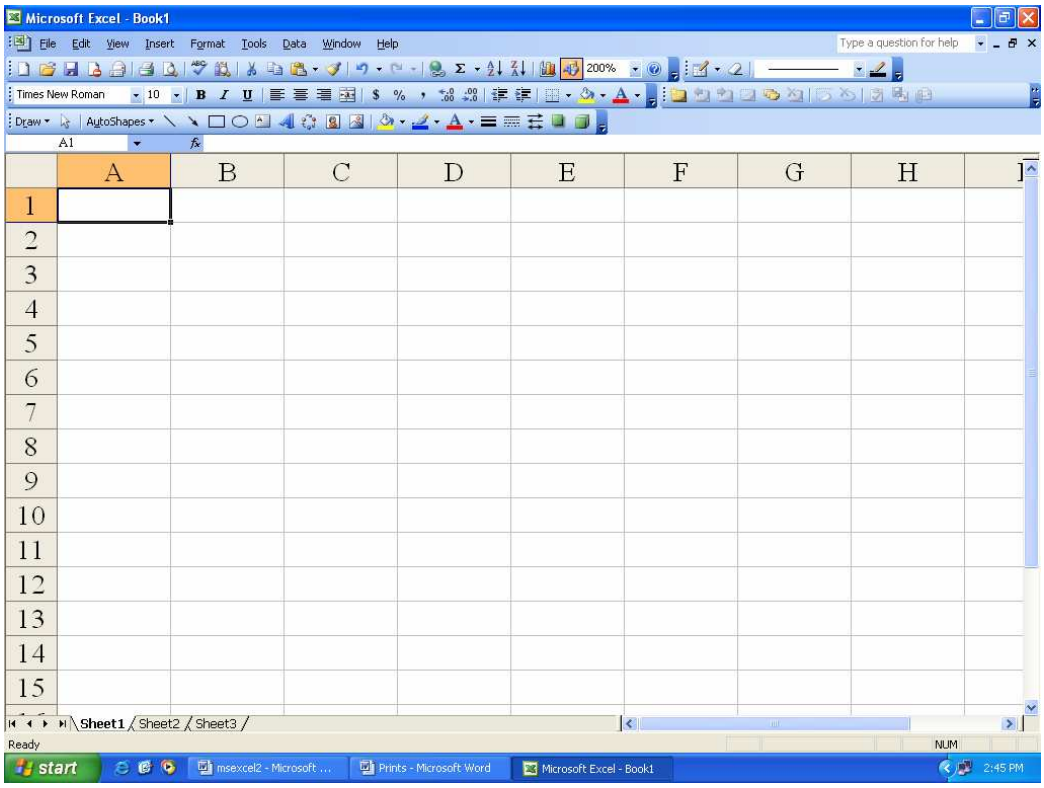
Workbook Management

Task 1: Creating a new workbook

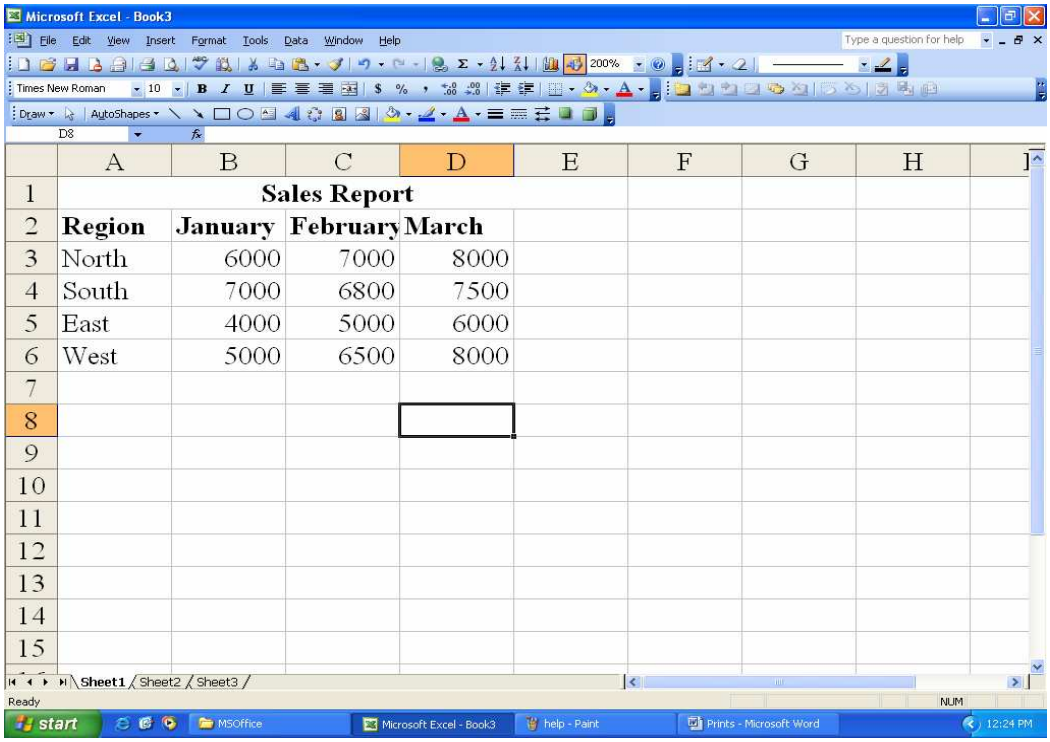
- Click on **File** menu and then click on **New**.



- Click **Workbook** and then click **OK** button. You will get the screen as shown below.

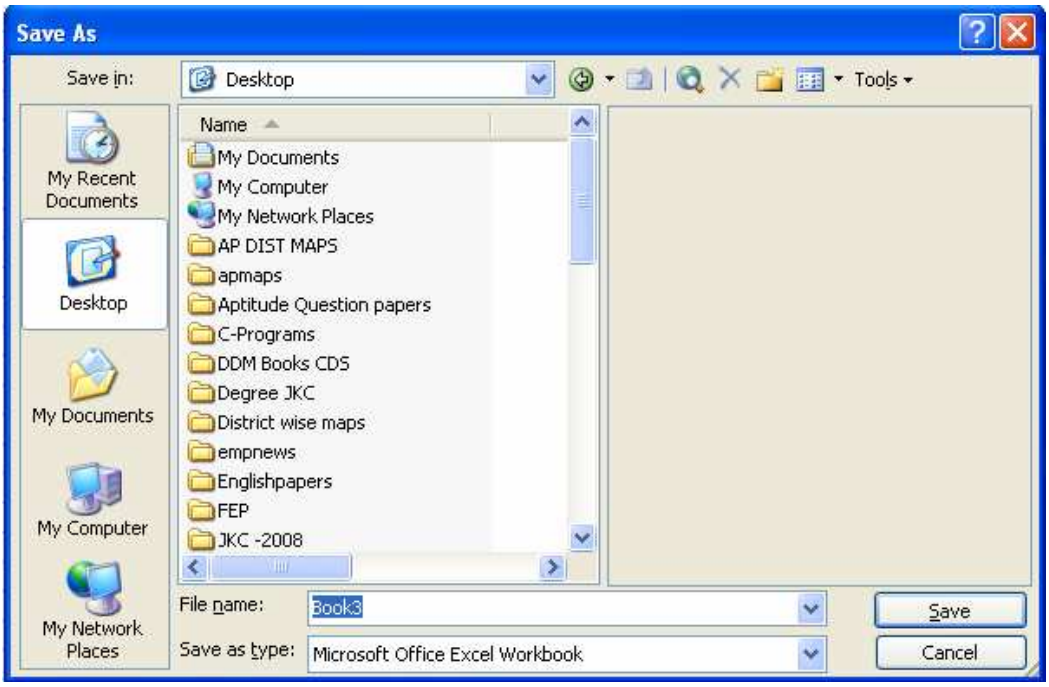


❖ Enter data as shown in the figure below :



Task 2: Saving Workbook

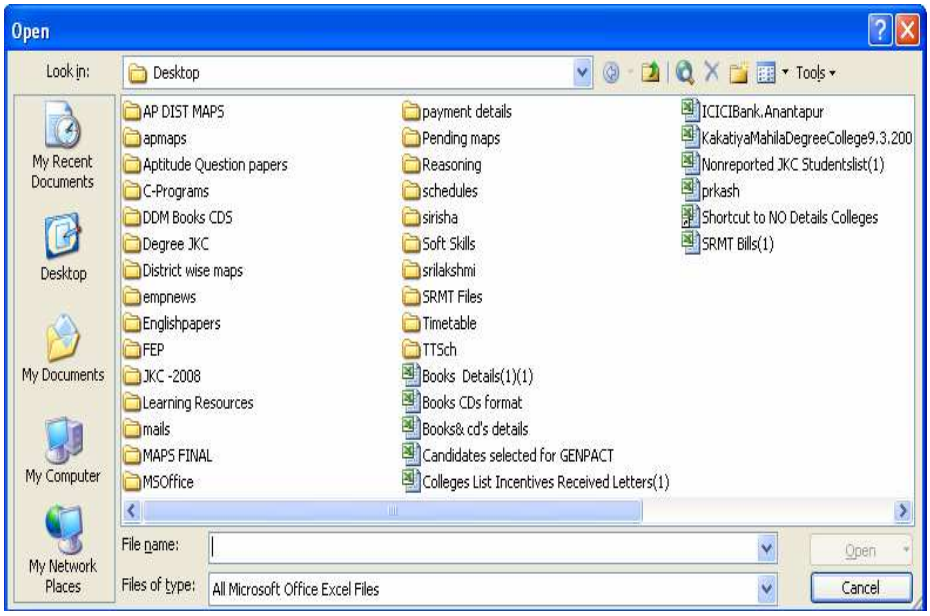
- Click on **File** menu and then click **save**. You will get the below screen



- In the **File name** text box, type **sample** and then click **Save** button

Task 3: Opening an existing workbook

- Click on the **File** menu and click on **Open**. The open dialog box will appear



- Click on some file (Example: **sample.xls**), then click on **Open**.

Task 4: Closing your workbook

- Click on **File** menu, then click **Close** to close your workbook

Cursor Management

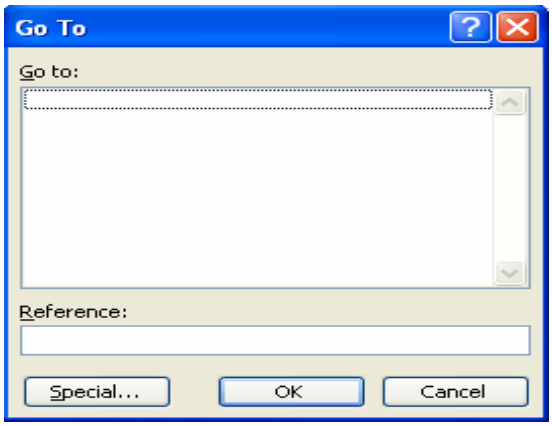
Task 1: Moving around the worksheet

- Open **sample.xls** workbook.
- Move the cursor in your worksheet by using the **arrow keys** on the right-hand side of the keyboard.
- When you have got lots of rows of data you can move the cursor more quickly by using the **PgUp** and **PgDn** keys to move up and down a screen at a time.
- To move one screen to the right, press the **Alt** key and **PgDn** keys together.
- To move one screen to the left, press the **Alt** and **PgUp** keys together.
- To move further to the right, just keep pressing the **right arrow** key
- To move back to cell A1, press the **Ctrl** and **Home** keys together.
- Pressing the **Home** key on its own takes you back to column A
- To move to the last column(**IV**) press the **Ctrl** and **right arrow** keys together.

- To move to last cell containing data, press **Ctrl** and **End** keys together.
- To move to the last row(*65,536*), press **Ctrl** and the **down arrow** keys together.
- You can also move the cursor with the mouse. Move the mouse pointer to the location you want. Press and release the left mouse button once when the cursor is where you want it.

Task 2: Moving to a Specified cell

- Click on the **Edit** menu, choose **Go To**. You will get the below screen

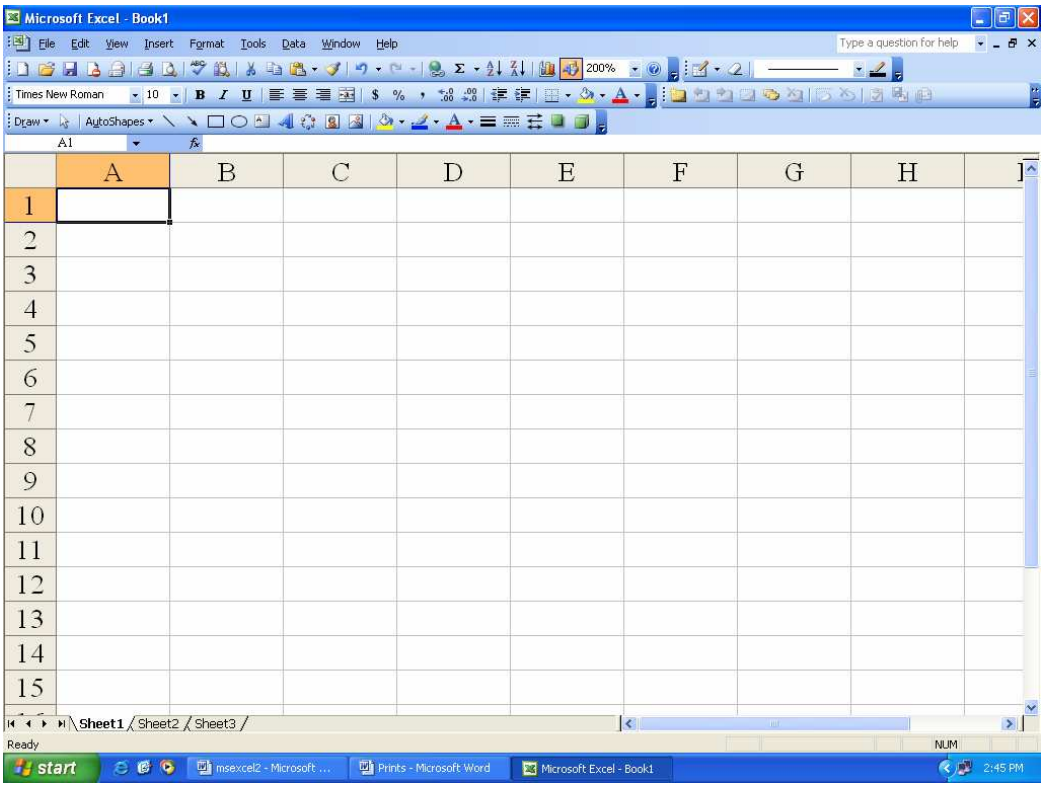


- Enter the destination cell reference in the **Reference** text box.
- Click **OK** to move directly to the specified cell.

Data Manipulation

Task 1: Entering data

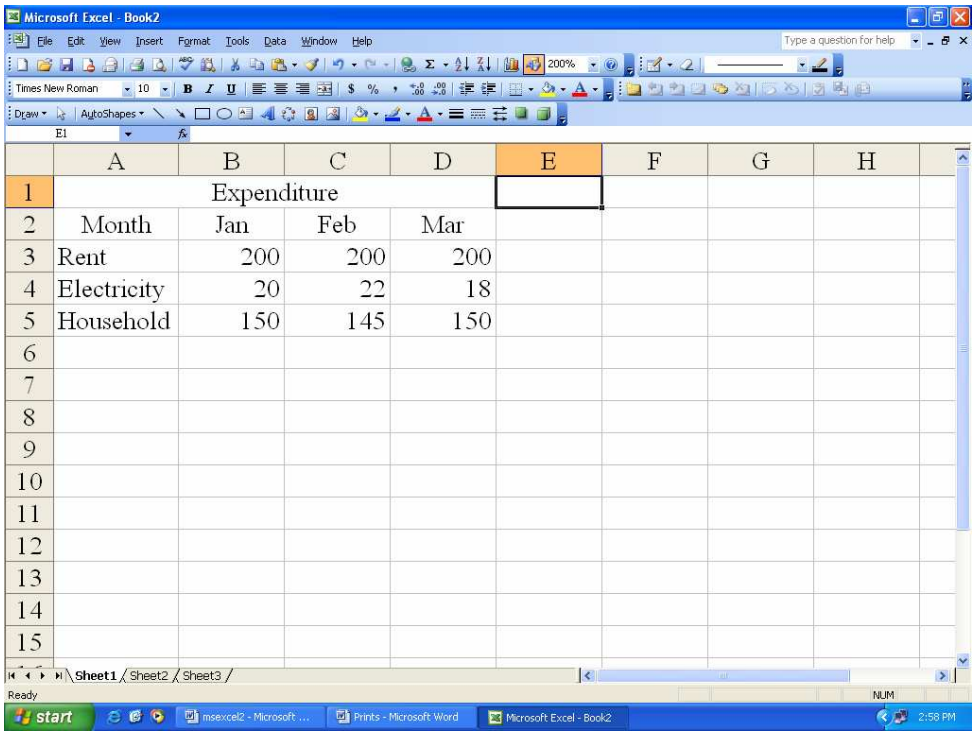
- Start **Excel**. Click **File** and then **New**. An empty worksheet appears as shown below



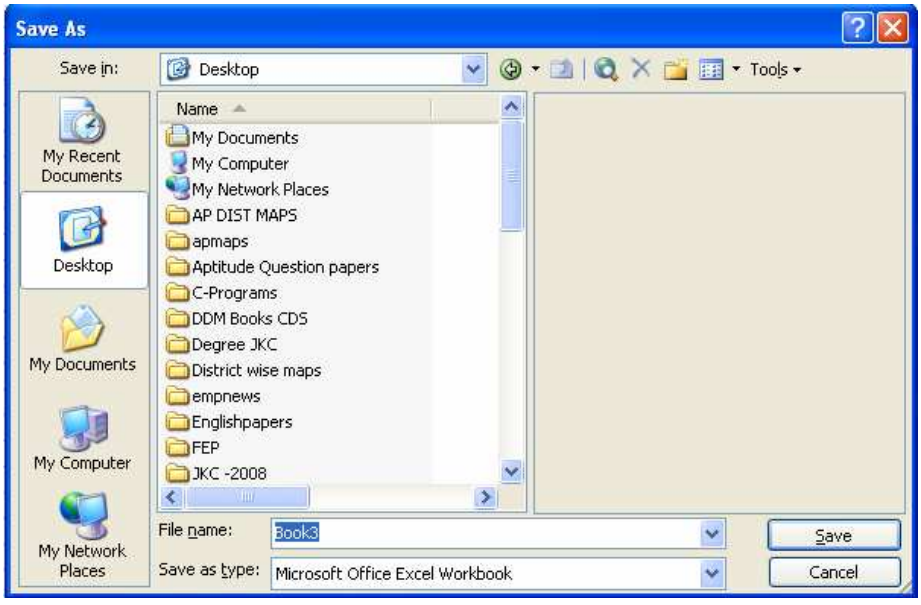
- Type **Expenditure** in cell A1 then press down arrow key to move to cell A2.

- Type **Month** then press the down arrow key to move to cell A3

- Continue to type the data. The resulting worksheet should appear like the following screen.



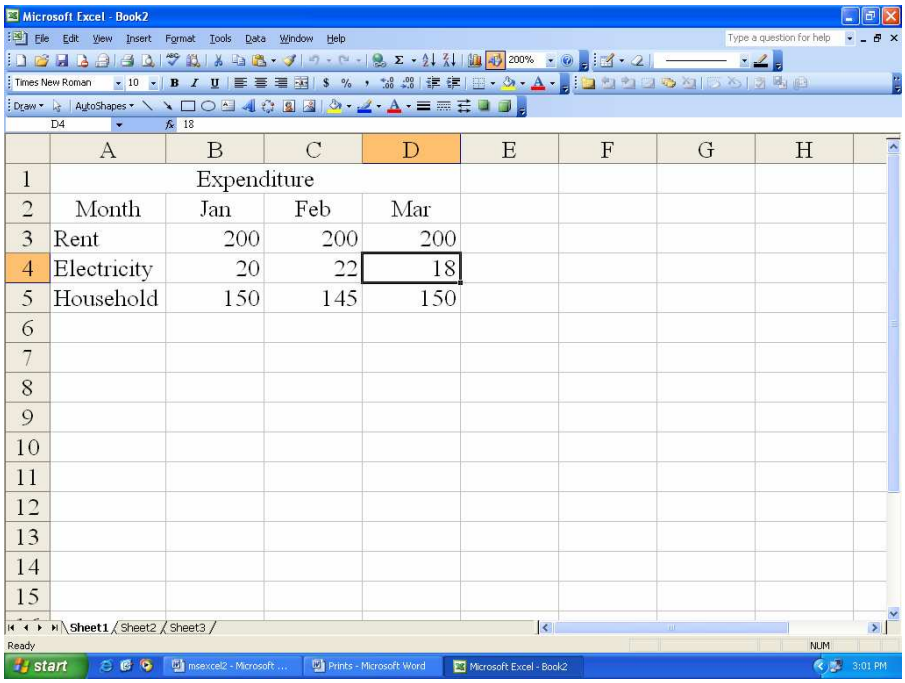
❖ Save your work by clicking **File** and then **Save As**. This dialog box appears.



❖ Type **cash** in the *File Name* text box and then click **Save** button. Excel automatically adds the extension **.xls** to your file name.

Task 2: Editing data

- Click **File** and then click **Open**.
- Click **cash.xls** and then click **Open.**
- Move the mouse pointer to cell D4, click and release. The cell is highlighted and 18 appears in the formula bar.
- Move the mouse pointer to the formula bar and click once to the right of 18.



- Use the **Backspace** key to delete 8,then type 4 and press **Enter**. Cell D4 now contains the value 14.

Task 3: Replacing cell data

- Make the cell B5 active by clicking on it.
- Type 200 and press Enter. The cell B5 will now contain the value 200 replacing old value (150).

Task 4: Deleting cell contents

- Move to cell C5 and click to select.
- Press the **Delete** key.
- The cell becomes blank.

- Drop down the **Edit** menu and click **Undo** to reinstate the 145. Excel 97 allows 16 levels of undo. You can use **Undo** and **Redo** buttons also.

Task 5: Copying data

- Open the **cash** spreadsheet.
- Select the cells D3 to D5
- Click **Edit** menu and then click **Copy**.
- Select the cells F3 to F5.
- Click **Edit** menu and then click **Paste**.
- Now the cells D3 to D5 are copied into F3 to F5.

Task 6: Moving data

- Open **cash.xls** spreadsheet.
- Select the cells from B3 to B5.
- Click **Edit** menu and then click **Cut**.
- Select the cells G3 to G5.
- Click **Edit** menu and then click **Paste**.

Task 7: **Data Auto Fill**

There is an easy method to fill the data in columns and rows. The data may be *Numeric* or *dates* and *text*.

To fill *Slno* by using *auto fill*

- Type Slno for 2 cells i.e 1,2 in the cells A1 and A2 respectively.
- Select two cells and drag the **Fill Handle** +

	A	B	C	D	E	F
1	1	2	3	4	5	6
2	2					
3	3					
4	4					
5	5					
6	6					
7	7					
8	8					
9	9					

To fill dates in the cells

- Type date in the cell
- Select the cell and drag the *Fill Handle*

	A	B	C	D
1	01/01/2008	02/01/2008	03/01/2008	04/01/2008
2	02/01/2008			
3	03/01/2008			
4	04/01/2008			
5	05/01/2008			
6	06/01/2008			
7	07/01/2008			
8	08/01/2008			
9	09/01/2008			
10	10/01/2008			
11	11/01/2008			

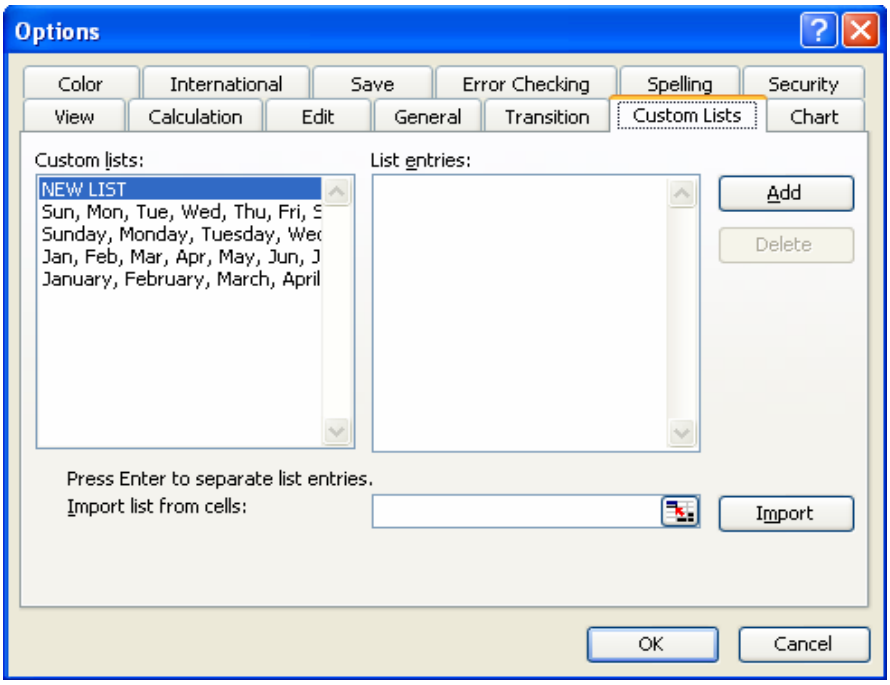
We can customize the lists with different text data to minimize the redundancy of work.

Some of the lists are listed below:

1. Jan, Feb, Mar, Apr, May, June, July…. like months
2. Sunday, Monday, Tuesday, Wednesday, Thursday…Like week days
3. Adilabad, Anatapur, Chittor, Cuddapah… like District names
4. Ravi, Kiran, Praveen, Rama…. like employees list

To create a customized list follow the steps given below:

- Click **Tools** Menu ,Click **Options** then click **Custom Lists** tab, Then you will find the figure given below:

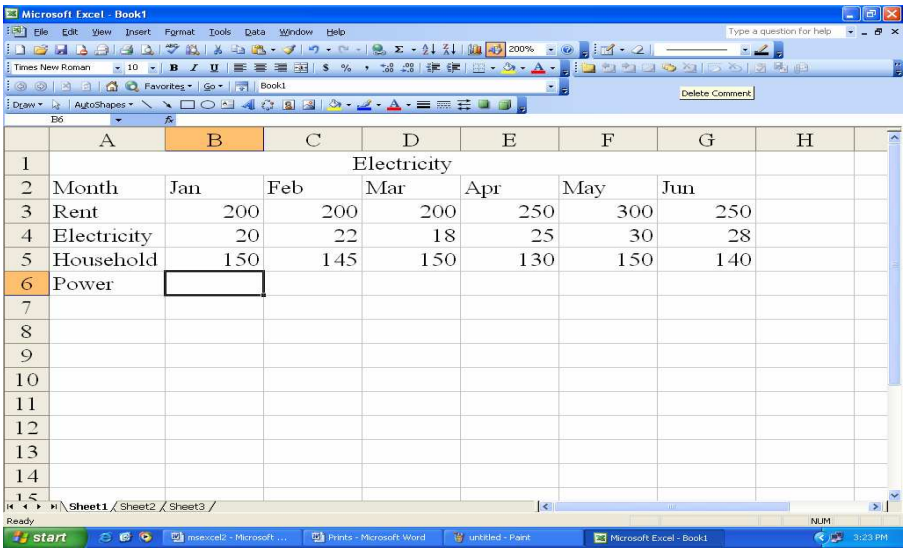


- Click **NEW LIST** and enter the list in the **List entries** window
- Click **Add** button then click **OK** button then your list will be added to the **Custom Lists**. That list you can use as and when required to type.
- Now you can Drag the **fill handle** (+) to get the list automatically.

Using Formulae and Functions

Task 1: Entering a formulae

- Click **File** and then click **New**.
- Enter the data in the new worksheet as shown below



- Cell B6 should contain formula. Move the cell pointer to cell B6.
- Type =B3+B5(*formulae and functions should always begin with* **=** *sign*)
- Cell B6 will now contain the value 350
- Look at cell B6; you will see the result of the formula in the cell B6 rather than formula.
- Now repeat the appropriate formula for cell C6, D6.
- Save your worksheet as **cash3.xls**.

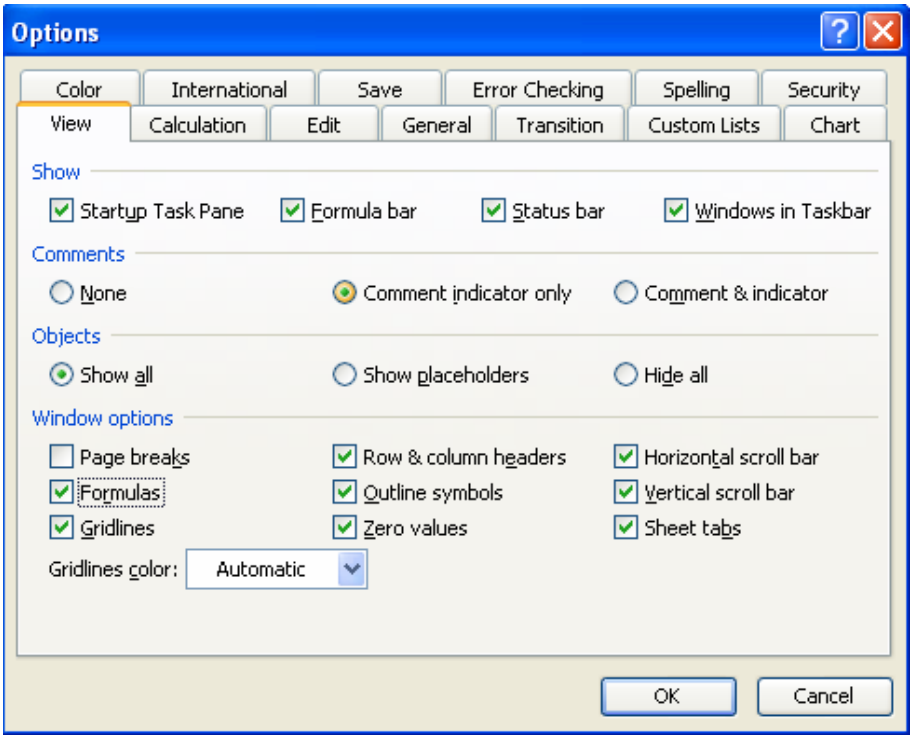
Task 2: Editing Formulae

- Move the cursor to the formula bar with the mouse, clicking once.
- Make the desired changes.
- When you have finished editing the formulae, press the Enter key for the changes to take effect.

  (OR)
- Edit the contents by pressing F2 key on the keyboard

Task 3: Displaying and Printing formulae

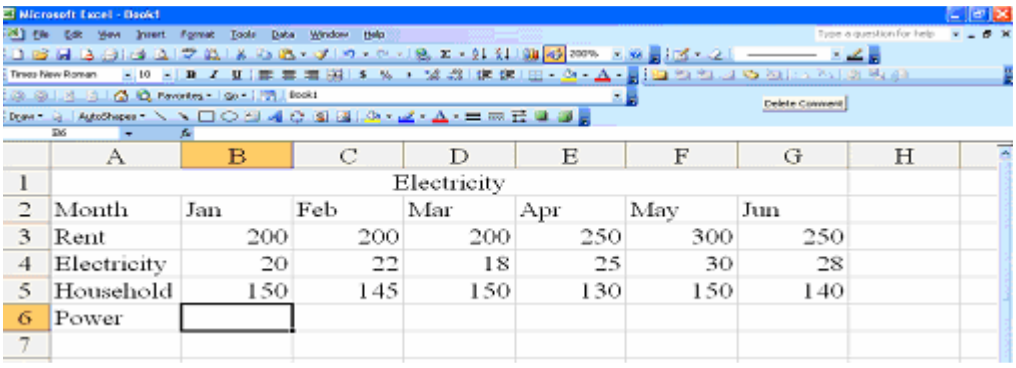
- Click **Tools** menu and then click **Options**.
- Click **View** tab.
- In **Window options** check **Formulas** check box. The below screen appears.



- Click **OK** button.
- To print the worksheet with formulae displayed, click **File** menu and click on **Print Preview**. If the layout is satisfactory, click on the **Print** button.

Task 4: Using the SUM function

- Open **cash3.xls** spreadsheet.



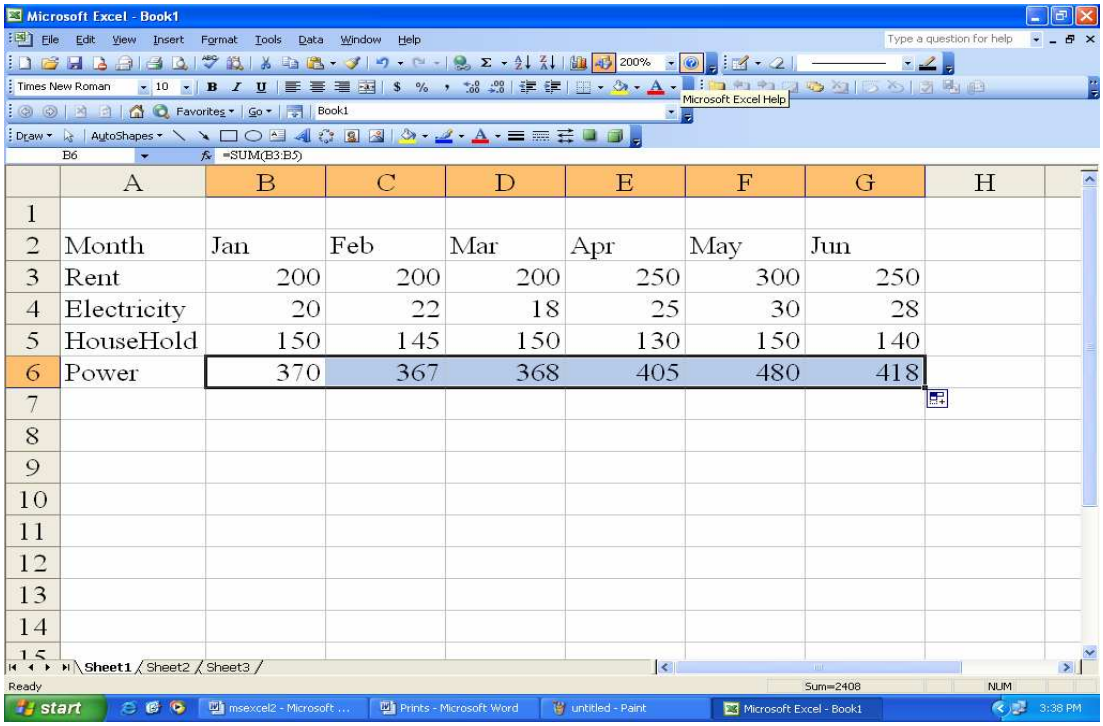
	A	B	C	D	E	F	G	H
1		Electricity						
2	Month	Jan	Feb	Mar	Apr	May	Jun	
3	Rent	200	200	200	250	300	250	
4	Electricity	20	22	18	25	30	28	
5	Household	150	145	150	130	150	140	
6	Power							
7								

- Suppose if you want the summation of the cells B3 to B5 should appear in the cell B6, then first select the cells from B3 to B6.

- Click the **Auto Sum** Σ icon on the toolbar.
- The result of (B3+B4+B5) will appear in the cell B6.

Task 4: Copying Formulae

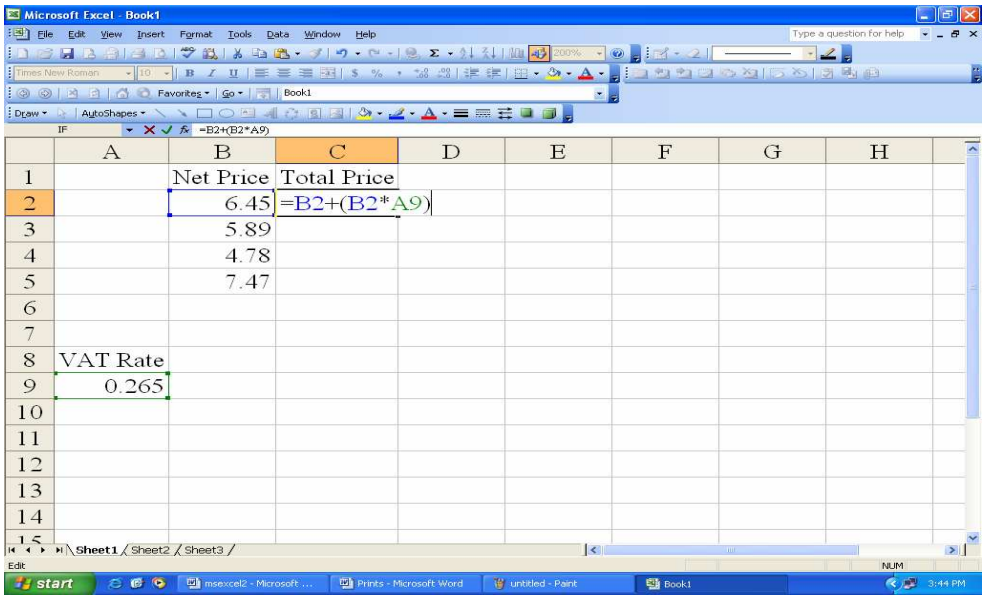
- Open **cash3.xls** spreadsheet.
- If you want to copy the formula in the cell B6 to C6,D6,E6 then first select the cell B6.
- Move the cursor to the lower right corner of the cell B6. The cursor will change to **+** icon.
- Drag the cursor from B6 to E6 and release left mouse button.
- You will notice that the cells C6, D6 and E6 are updated immediately as shown below.



	A	B	C	D	E	F	G	H
1								
2	Month	Jan	Feb	Mar	Apr	May	Jun	
3	Rent	200	200	200	250	300	250	
4	Electricity	20	22	18	25	30	28	
5	HouseHold	150	145	150	130	150	140	
6	Power	370	367	368	405	480	418	
7								
8								
9								
10								
11								
12								
13								
14								

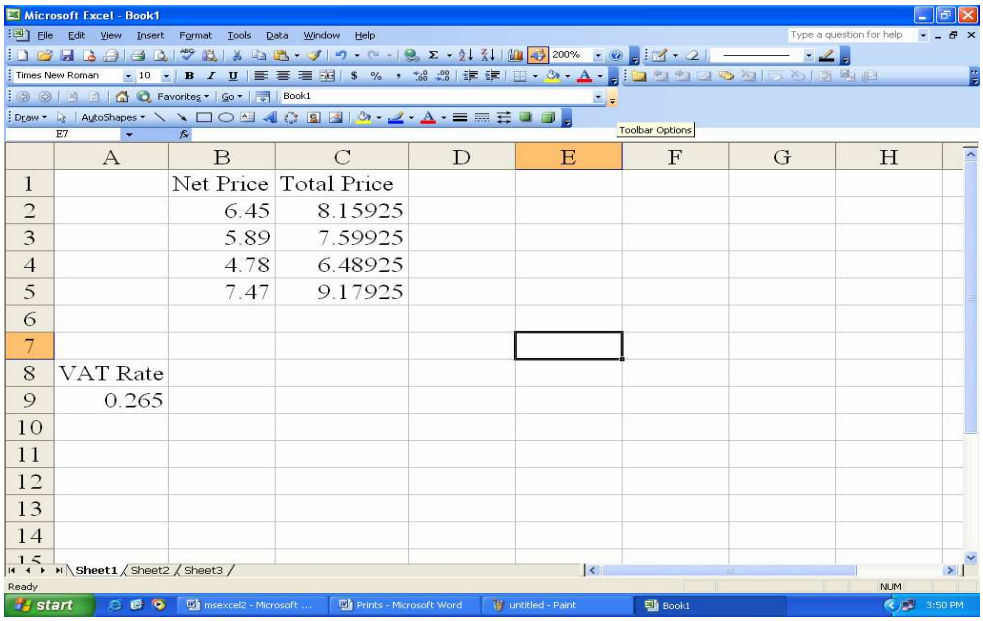
Task 5: Copying formulae using absolute addressing

- Create the worksheet shown below and save **ABS**
- If you copy the formula in the cell c2 to c3, c4, c5 you will get the incorrect



- result because the formula will change in the cell (C3)to B3*A10 but the value in the A10 is not defined. The reason is that we are copying relative address but not absolute address. To use absolute address move to c2 cell.

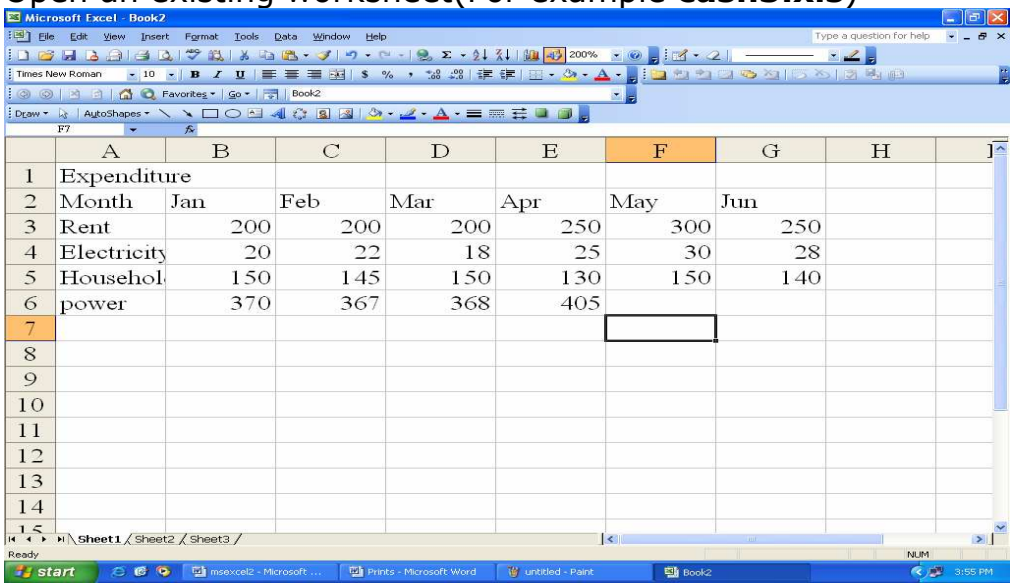
- Edit the formula to **=B2+(B2*A9)** and press **Enter** key.
- Copy the formula to cells C3 to C5.



Formatting Spreadsheet

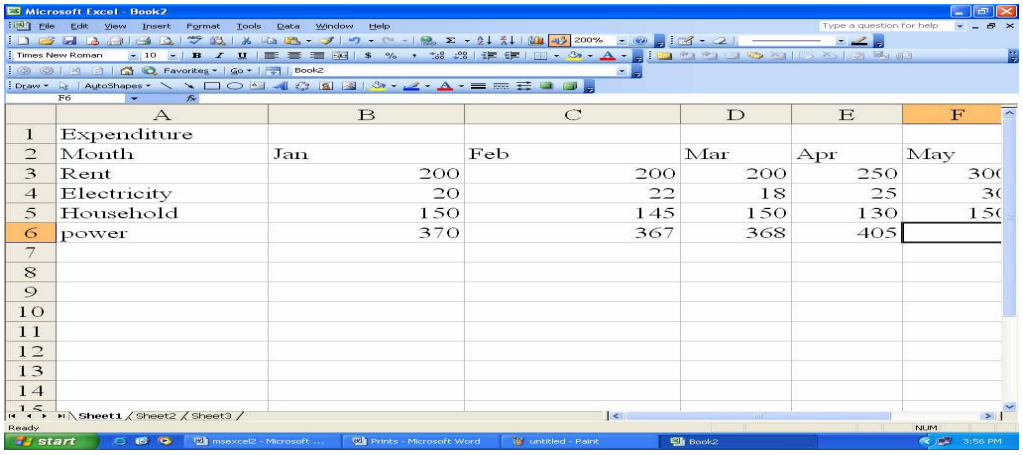
Task1: Increasing column width

- Open an existing worksheet(For example **cash3.xls**)



	A	B	C	D	E	F	G	H
1	Expenditure							
2	Month	Jan	Feb	Mar	Apr	May	Jun	
3	Rent	200	200	200	250	300	250	
4	Electricity	20	22	18	25	30	28	
5	Household	150	145	150	130	150	140	
6	power	370	367	368	405			
7								
8								
9								
10								
11								
12								
13								
14								
15								

- Move the mouse pointer to the position(column B)shown below in the column header. When the black cross appears, hold down the left button and drag the mouse to the right to increase the column width by the required amount.



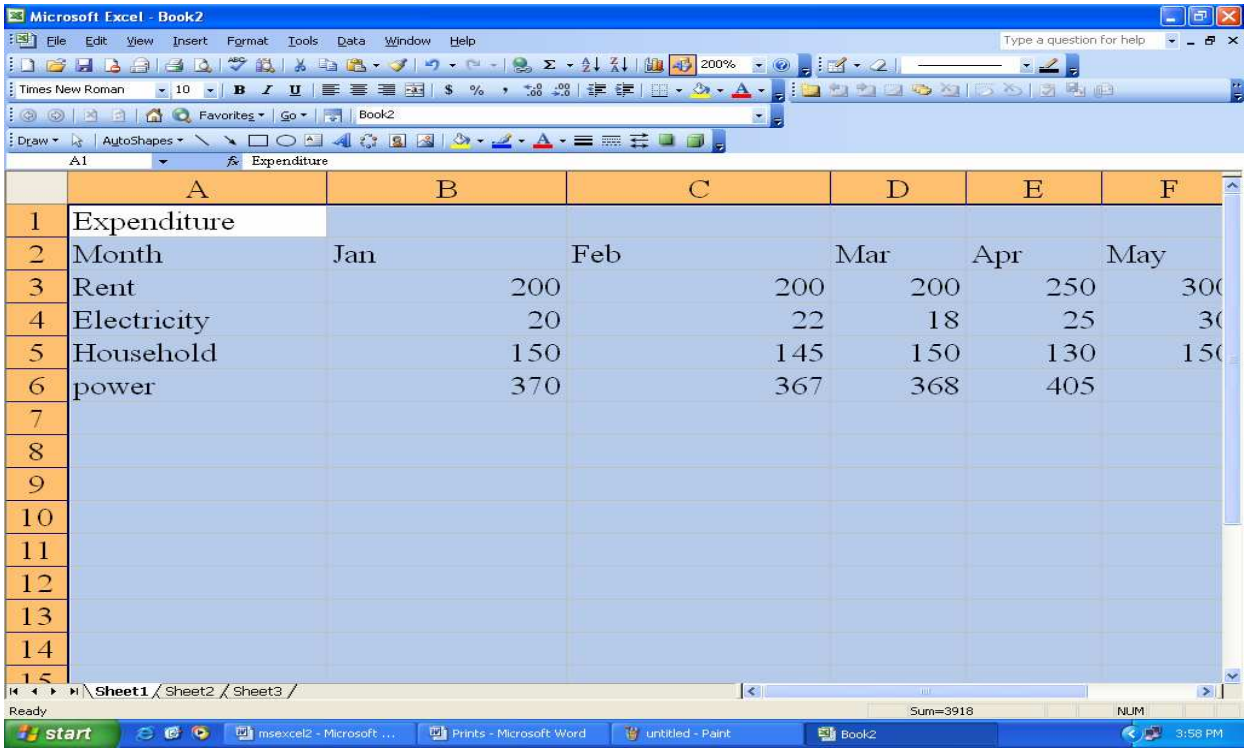
	A	B	C	D	E	F
1	Expenditure					
2	Month	Jan	Feb	Mar	Apr	May
3	Rent	200	200	200	250	30(
4	Electricity	20	22	18	25	3(
5	Household	150	145	150	130	15(
6	power	370	367	368	405	
7						
8						
9						
10						
11						
12						
13						
14						
15						

Task 2: Decreasing column width

- Open **cash3.xls** spreadsheet.
- Move the mouse pointer to the **column B**. When the black cross appears, hold down the left button and drag the mouse to the left to reduce the cell width.

Task 3: Changing width of all cells in a spreadsheet

- Open ***cash3.xls*** spreadsheet
- Select the entire worksheet by clicking the **Select All** button (to the left of A1 cell) at the top left corner of the worksheet. The worksheet changes from white to black.

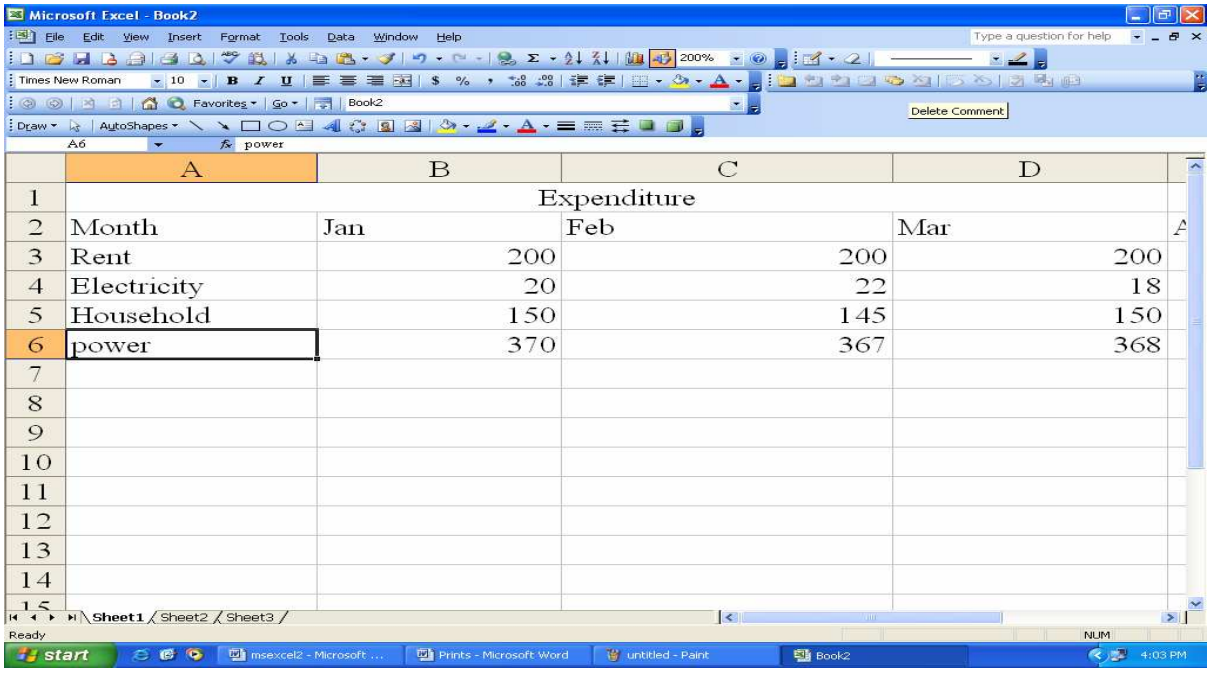


	A	B	C	D	E	F
1	Expenditure					
2	Month	Jan	Feb	Mar	Apr	May
3	Rent	200	200	200	250	300
4	Electricity	20	22	18	25	30
5	Household	150	145	150	130	150
6	power	370	367	368	405	
7						
8						
9						
10						
11						
12						
13						
14						

- Click **Format** menu, click **Column**, then click **Width**

- In the column width text box type 20, then click **OK** button. Your worksheet cells should all increase in width.

- You will get the below screen. You will notice that widths of all columns are now changes to 20

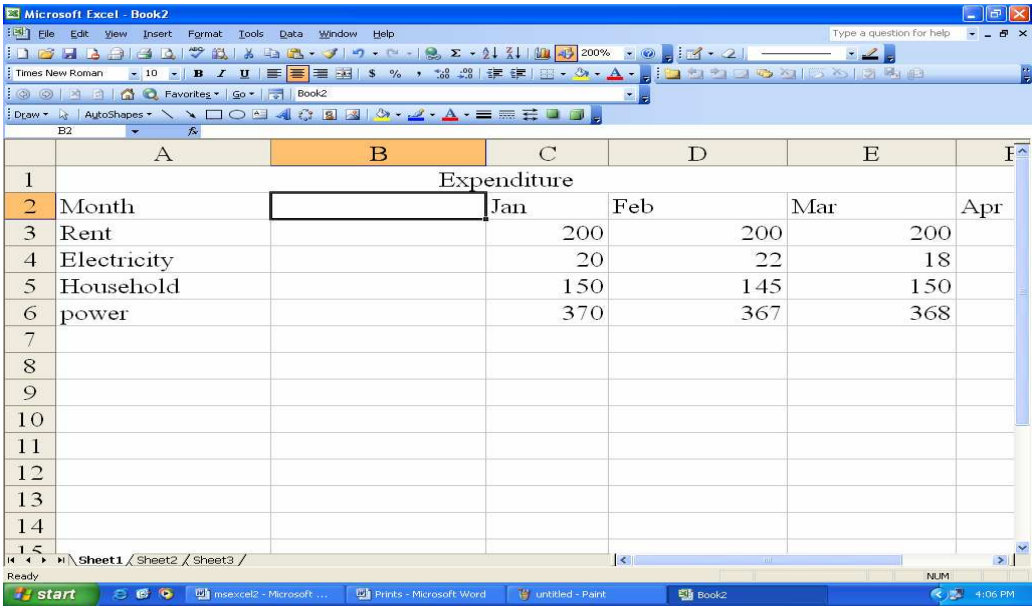


.

- Click the **Undo** button to revert to the previous cell width.

Task 3: Inserting Columns

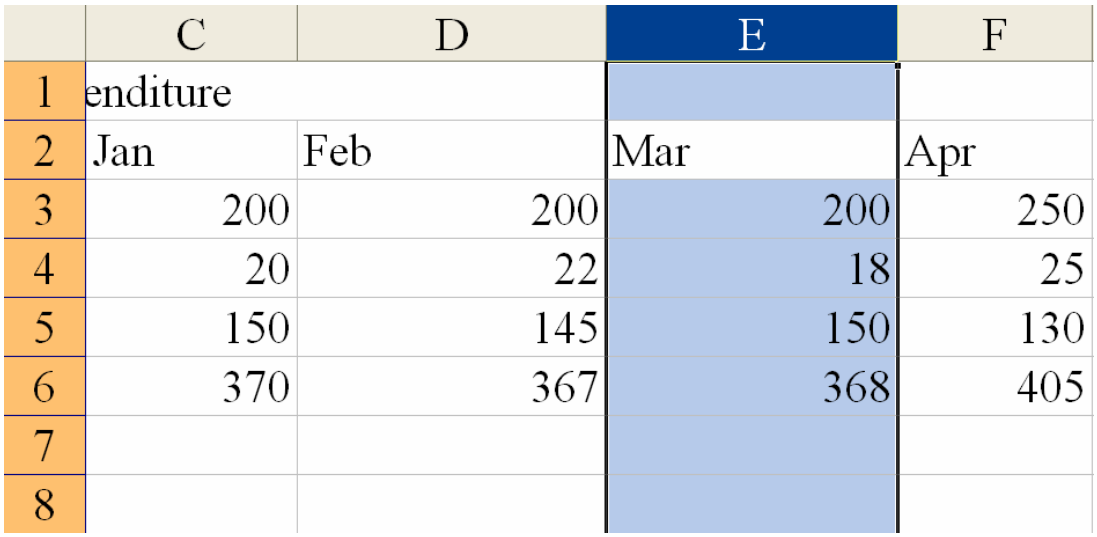
- Open **cash.xls** spreadsheet.
- Move to cell B2 and click.
- Click **Insert** menu, click **Columns.** You will get the below screen.



- A blank column will be inserted before(to the left of column B)

Task 4: Deleting Column contents

- Open cash.xls spreadsheet.
- Move the mouse pointer to column E header and click to select column E



	C	D	E	F
1	enditure			
2	Jan	Feb	Mar	Apr
3	200	200	200	250
4	20	22	18	25
5	150	145	150	130
6	370	367	368	405
7				
8				

- Press **Delete** button. The column contents will be deleted.
- Click **Undo** button to revert to the previous screen.

Task 5: Removing columns, rows, and cells completely

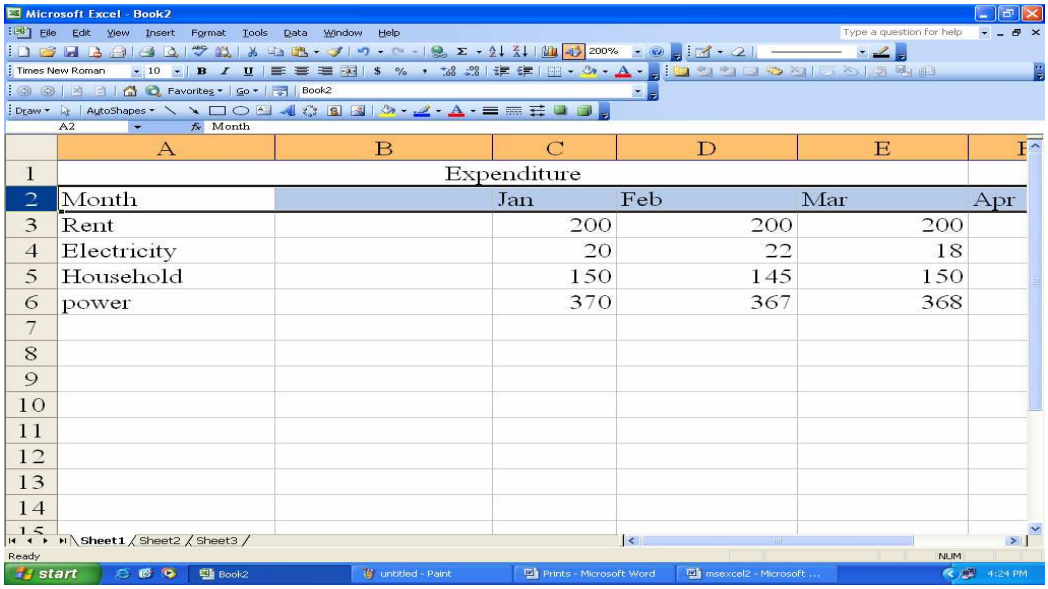
- Select individual columns or rows or cells.
- Click **Edit** menu and click **Delete**

Task 6: Inserting a row

- When you insert a row, it is inserted above the current row, so if you want to insert a new row above row 6(between rows 5 and 6), place the cursor on a cell in row 6 and
- Click on the **Insert** menu.
- Click **Entire Rows** insert a blank row between rows 5 and 6.

Task 7: Deleting row contents

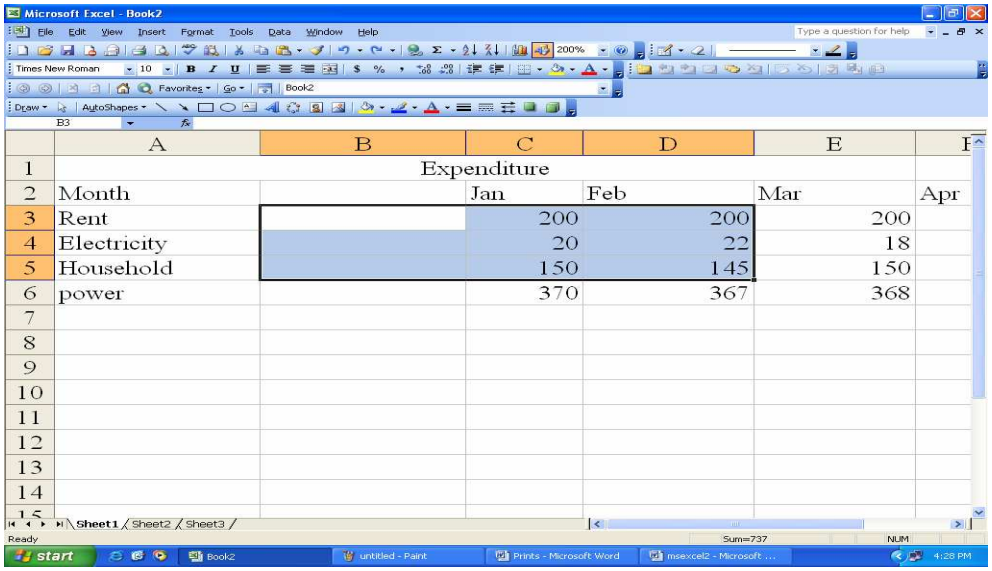
- Open **cash.xls** spreadsheet.
- Move the mouse pointer to row 2 header and click to select the row as shown below



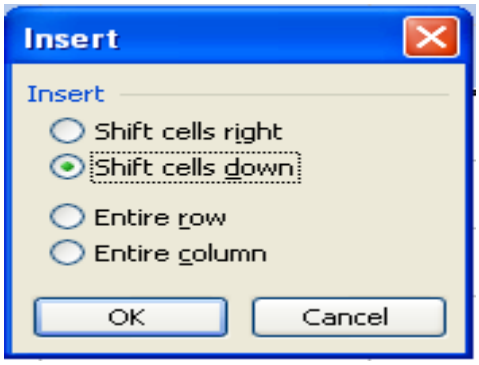
- Press **Delete** to remove the contents of row.
- Click the **Undo** button to cancel the delete operation.

Task 7: Inserting cells

- Open **cash.xls** spreadsheet.
- Select cells B2 to D4 by moving the mouse pointer to cell B2, holding down the left mouse button and dragging the mouse pointer to cell D4, then releasing the left button. The cells should be highlighted.



- Click **Insert** menu and click **Cells**. This dialog box appears.
- Click **OK** to shift the cell down.



Task 8: Changing data justification

- Open **cash.xls** spreadsheet.
- Select the cell B2 as shown below.
- Here the text "Jan" by default **left justified.** You can modify alignment as **right justified** or **center** by clicking right justify or center the text within the cell by clicking respectively.

Task 9: Merge and Center data

- Open **cash.xls** spreadsheet.
- Select the cells A1 to H1 as shown below

	A	B	C	D	E	F	G	H
1	Expenditure							
2	Month	Jan	Feb	Mar				
3	Rent	200	200	200				
4	Electricity	20	22	18				
5	Household	150	145	150				
6								

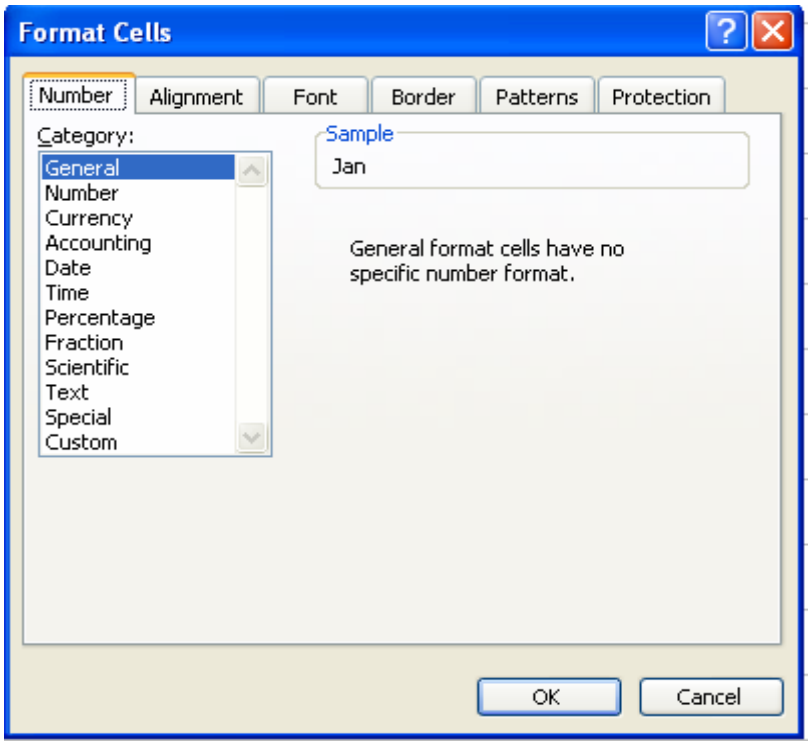
- Click **Merge and Center** button on the toolbar
- You will get the below screen.

	A	B	C	D	E	F	G	H
1	Expenditure							
2	Month	Jan	Feb	Mar				
3	Rent	200	200	200				
4	Electricity	20	22	18				
5	Household	150	145	150				
6								

Task 10: Formatting cells

	A	B	C	D
1				
2		**Marks**		
3		200	66.66666667	
4		440	22.22222222	
5		640	213.3333333	
6				
7				

- Create a new spreadsheet as shown below and save it as "**marks.xls**"
- Now you can format the cells in column C by selecting column C by clicking on the column heading



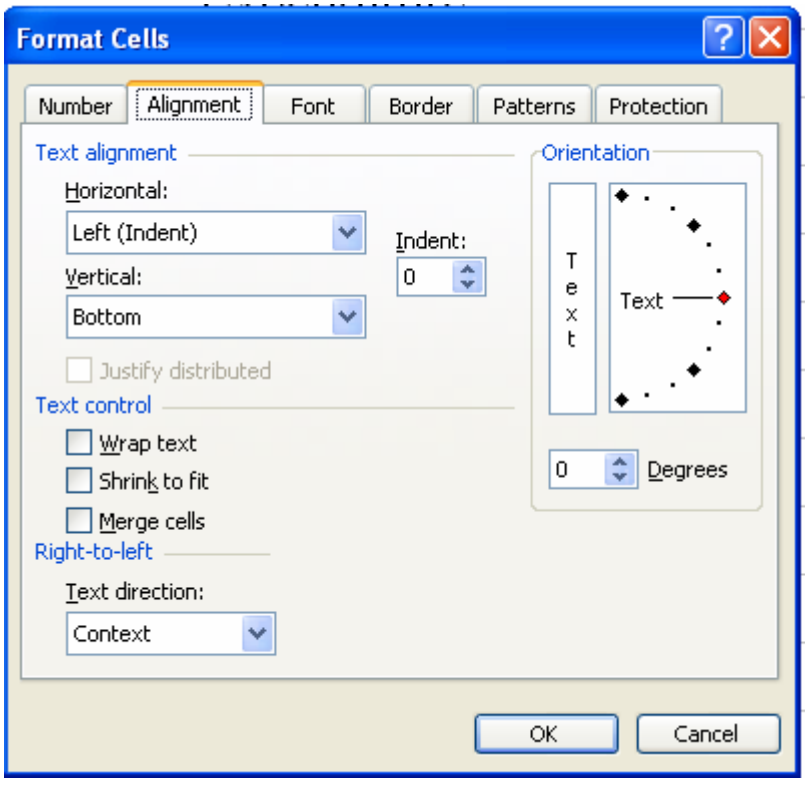
- Click **Format** menu and click on **Cells**. Click on **Number**.
- Use the **Down arrow** in the **Decimal Places** to set to **0**. Click **OK**.
- Now repeat the formatting but this time format the cells to two decimal places.

- Again, repeating the formatting operation, but this time to four decimal places.
- Finally, format the cells to eight decimal places. This screen will appear.

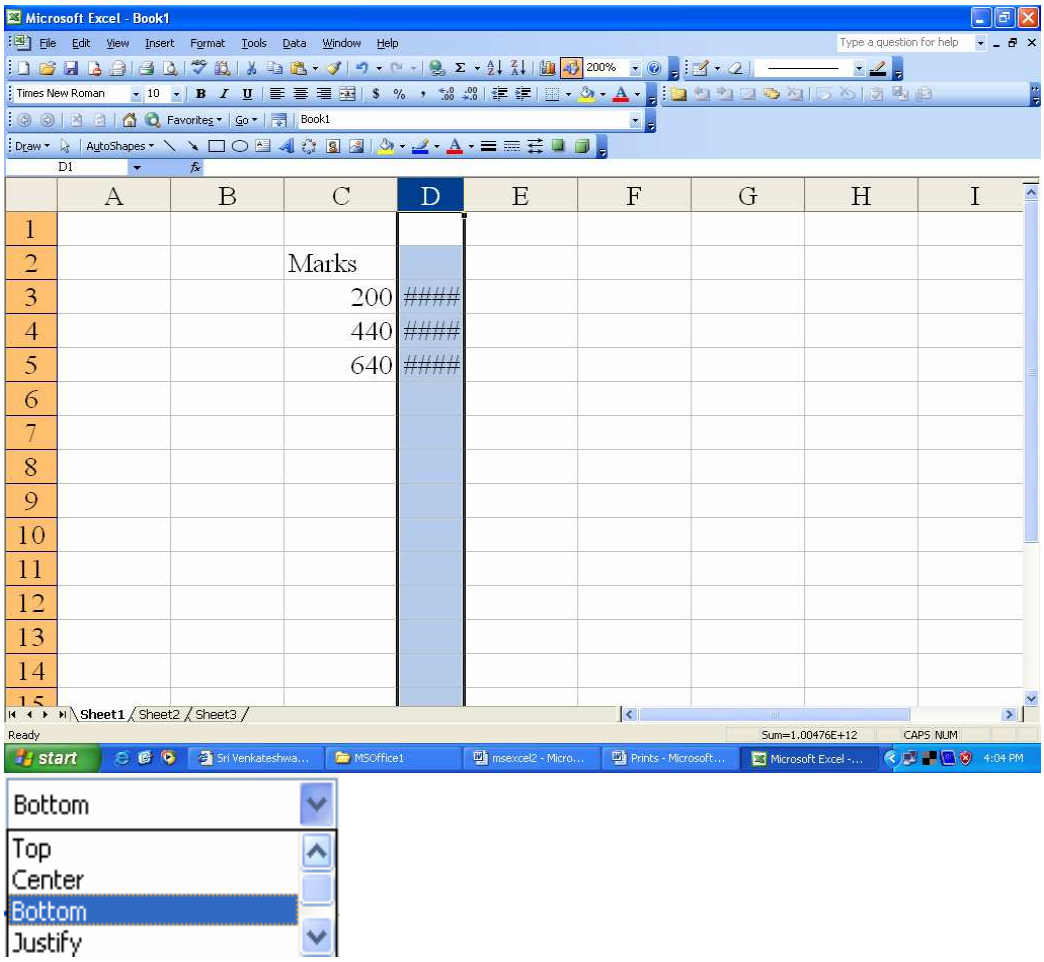
- The #### symbols indicate that the cell is too narrow to display the data in the chosen format. However, if you increase the cell width sufficiently, the data will be displayed to eight decimal places.
- Increase the width column C until the data is displayed.
- Now change the formatting back to two decimal places, and reduce the column width to a suitable width.

Changing the data Orientation (Vertical, Horizontal etc.)

- Excel offers three options that let you control the orientation of the text within a cell. These are *Text alignment, Text orientation,* and *Text control*.



Vertical text alignment can be any one of the following



To display text vertically in a cell:

- Choose **Cells** from the **Format** menu.
- Click the **Alignment** Tab.
- Specify the desired text orientation by selecting one of the orientation boxes.
- Select the **Wrap text** check box, if you want Excel to wrap the text
- Click **OK**

Here are some examples of the different alignment options

	A	B	C	D	E	F
1	Horizontal Text	Wrapped Horizontal Text	Vertical	Vertical text	Slant text	Wrapped slant text

- Select **vertical** list box and select **top** to align the data at the top of the cell (Eg: cell A1)

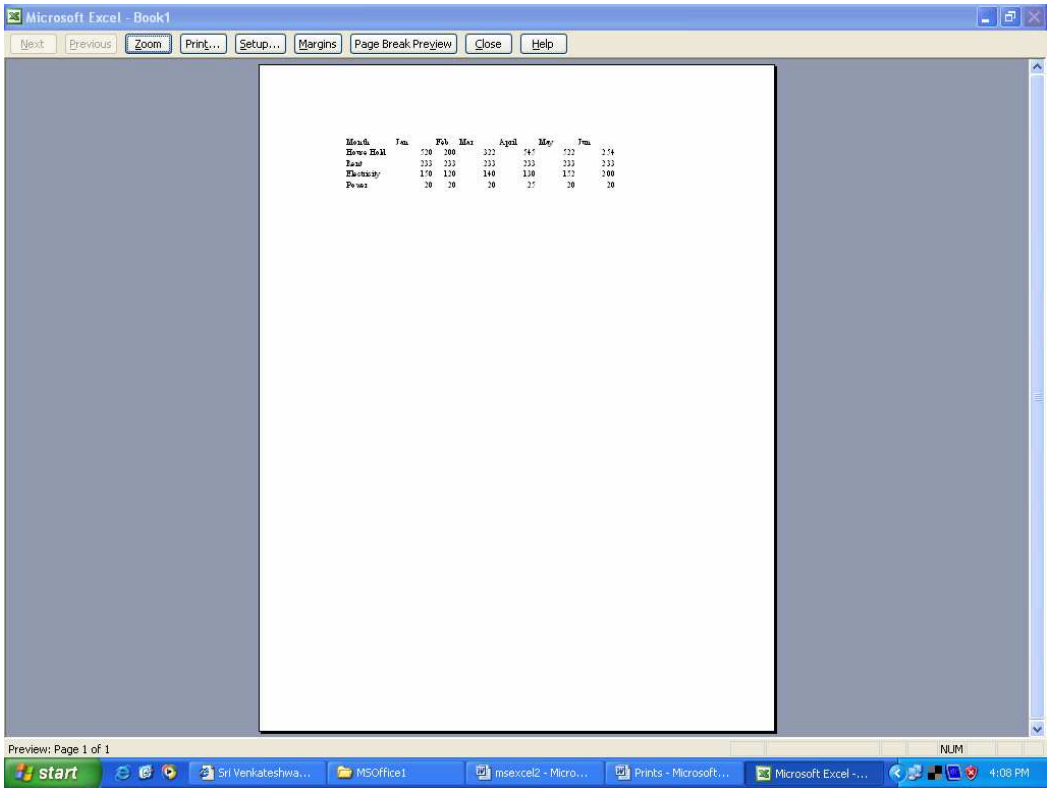
- The below figure shows you different Text control options.

	A	B	C	D	E
1	Text control with Wrap text	Text control with Shrink to fit	Text control with merge cells		

Printing and layout

Task 1: Previewing a printout

- Open **cash.xls** spreadsheet.
- Click on the **File** menu and click on **Print Preview**. A screen similar to this should appear.

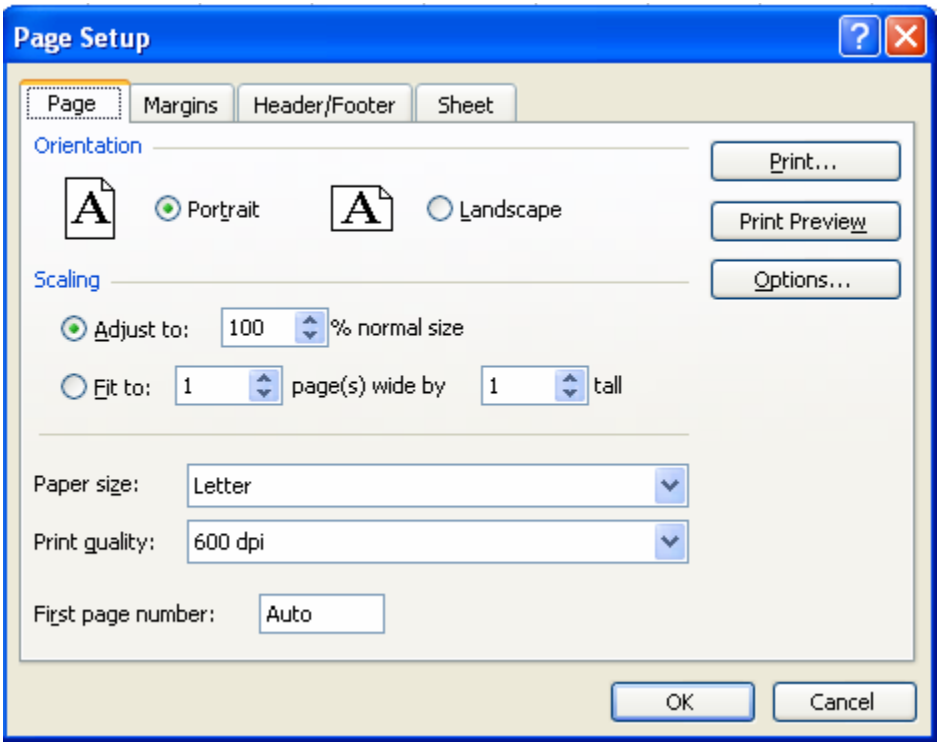


- Since the size of the text is very small, you can click on **Zoom** button, it magnifies the worksheet. Clicking on **Zoom** second time returns you to the original preview format.
- Press **PgDn** to move through your worksheet if it is more than one page long.
- Before printing make sure that your printer is switched on, is loaded with the appropriate paper, and is on-line.
- If you are happy with the layout of your document, click on the

Print button to obtain a printout. You should see a message on screen telling you that your file is being printer, and on which paper.

Task 2: Printing landscape

- To select **landscape** mode, click on the **File** menu, **Page Setup** this screen will appear.
- Click on the **Landscape** button.



Task 3: Fitting your worksheet to one page

- In the above screen click on the **Fit To:** box and type: *1 page wide by 1 page tall.*

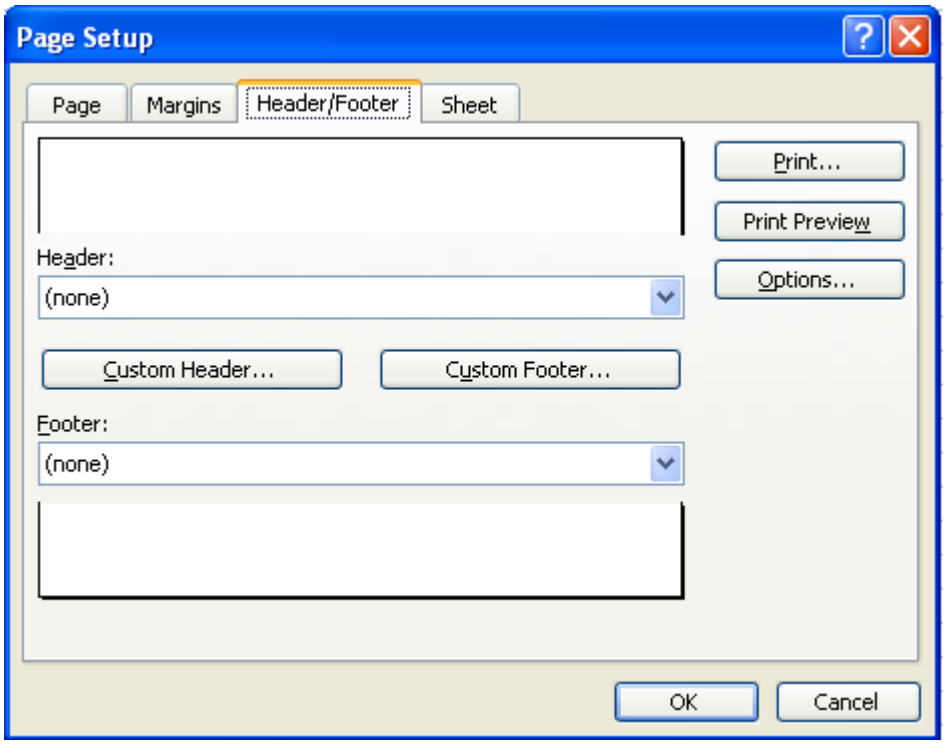
- If you need to make changes to your worksheet before printing, click on the **Close** button to return to your workbook.

Task 4: Adjusting margins

- In the **Page Setup** dialog box, click the **Margins** tab and enter the appropriate sizes(in *inches* or *centimeters*)

Task 5: Setting *Header/Footer* to your worksheet

- From the **Page Setup** dialog box, click on the **Header/Footer** tab to display the below screen.



- In the **Header** box either you select a title from the drop down menu or enter your own title. Similarly for **Footer** box also you can set your own title.
- Click on **OK**.

Task 6: Printing selected cells

- Open **cash.xls** spreadsheet.
- Click on the **row 2** button (or any other row containing data) to highlight the entire row.

- Click on **File**, **Print Area**, **Set Print Area**. The preview screen should only display the selected cells. (Row 2).
- If the preview is satisfactory, click the **Print** button to print out only row 2.
- Click on **File**, **Print Area**, **Clear Print Area** to reset the Print Area.

Creating charts and graphs

Task 1: Creating a Pie Chart

- Open **cash.xls** spreadsheet.
- Select the cells A1 to G5 as shown below

	A	B	C	D	E	F	G
1	Expenditure						
2	Month	Jan	Feb	Mar	Apr	May	Jun
3	Rent	200	200	200	250	300	250
4	Electricity	20	22	18	25	30	28
5	Household	150	145	150	130	150	140

- Click on **Insert** menu and click **Chart** option. This will start the Office Assistant, to guide you through creating chart.

- Follow the instructions in each step of the Wizard. The Assistant explains each step.
- At step 3, you can specify the **Chart title, X-axis title** and **Y-axis title** separately.
- At step 4, click **As object in** sheet 1, then click **Finish.**
- Your chart is now finished. Save as **cash4.** Your chart is saved with the spreadsheet. This type of chart is known as an *embedded chart* and is saved with its worksheet.

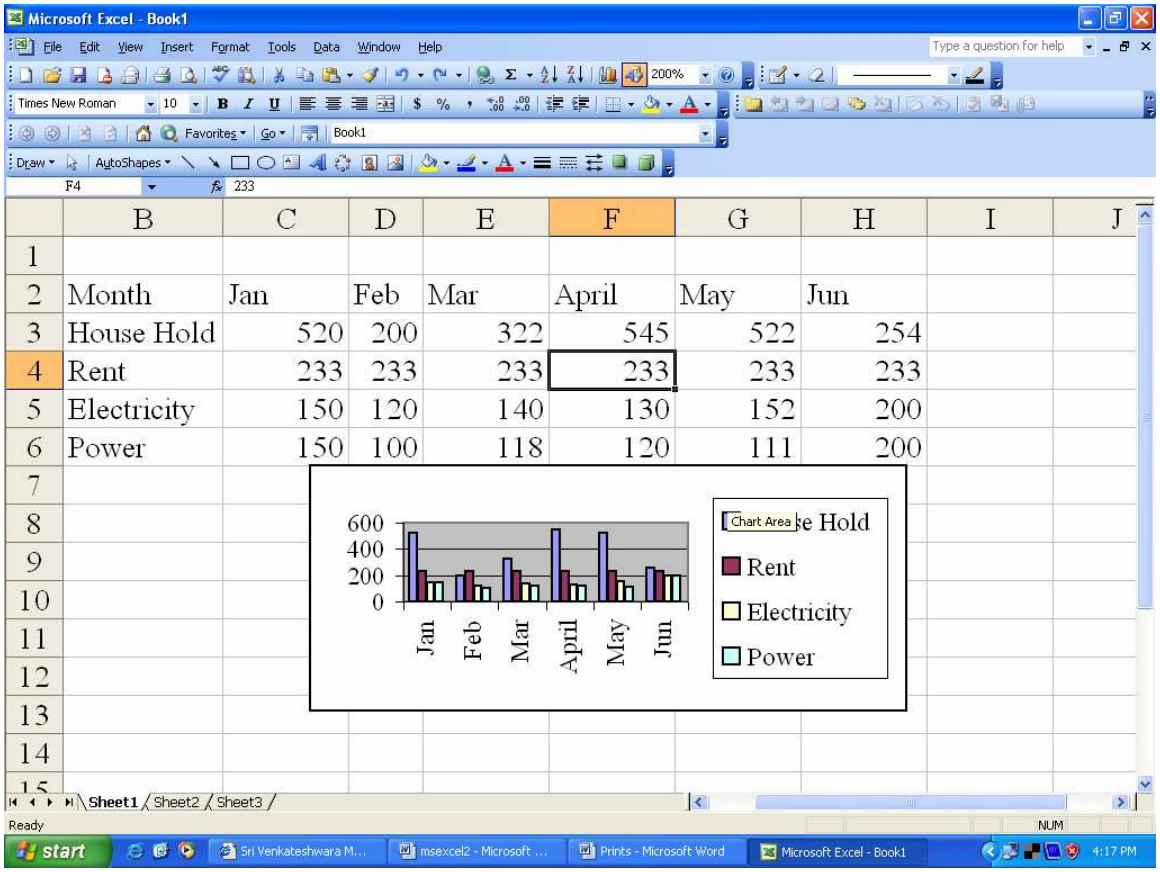
Task 2: Creating charts when the data range is not continuous

- Open **cash4.xls**
- If your requirement is create a chart to show expenditure for February, then first select cells A2 to A5.
- Hold down the **Ctrl** key and, while holding it down, select cells C2 to C5. Your screen should be similar to this one.
- Click on the **Chart Wizard** and create a **column chart**. Your screen should look similar to this.

- If your chart doesn't appear to show any data, you probably included some other cells, probably A1 and/or C1. If so, delete your chart and re-select the correct range.

Task 3: Sizing a chart

- Open the **cash3.xls** created earlier. A screen similar to this one should appear.



	B	C	D	E	F	G	H
1							
2	Month	Jan	Feb	Mar	April	May	Jun
3	House Hold	520	200	322	545	522	254
4	Rent	233	233	233	233	233	233
5	Electricity	150	120	140	130	152	200
6	Power	150	100	118	120	111	200

- The small black markers at each corner and mid-way along each side of the chart. These indicate that the chart is selected, and are called its selection squares.
- Click on the mid-point marker on the right-hand side, hold down the left mouse button and drag the mouse to the right about one inch(3cm), then release the mouse. The width of the chart will have increased.
- Now practice the same operation on the mid-point marker of each of the other sides of the chart.
- Now try the above, but this time on one of the four corner markers. Note that when you use these techniques, the whole chart changes in size, but it retains its original proportions.

- Now use the same technique to reduce the size of the chart.

Task 4: Deleting Charts

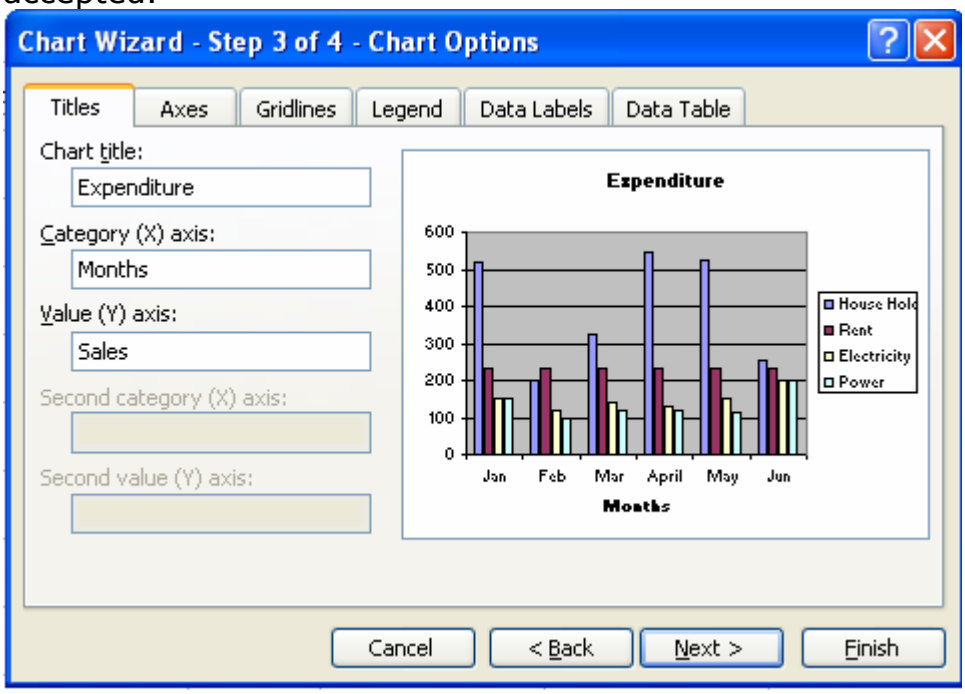
- Make sure the chart is selected(the small black markers are visible). If not, move the mouse pointer into the chart area and click and release the left mouse button once.
- Press **Delete** to delete the chart.

Task 5: Moving charts and graphs

- Make the chart active.
- Move the mouse pointer into the chart area.
- Hold down the left mouse button and drag the chart to the desired position.

Task 6: Chart headings and labels

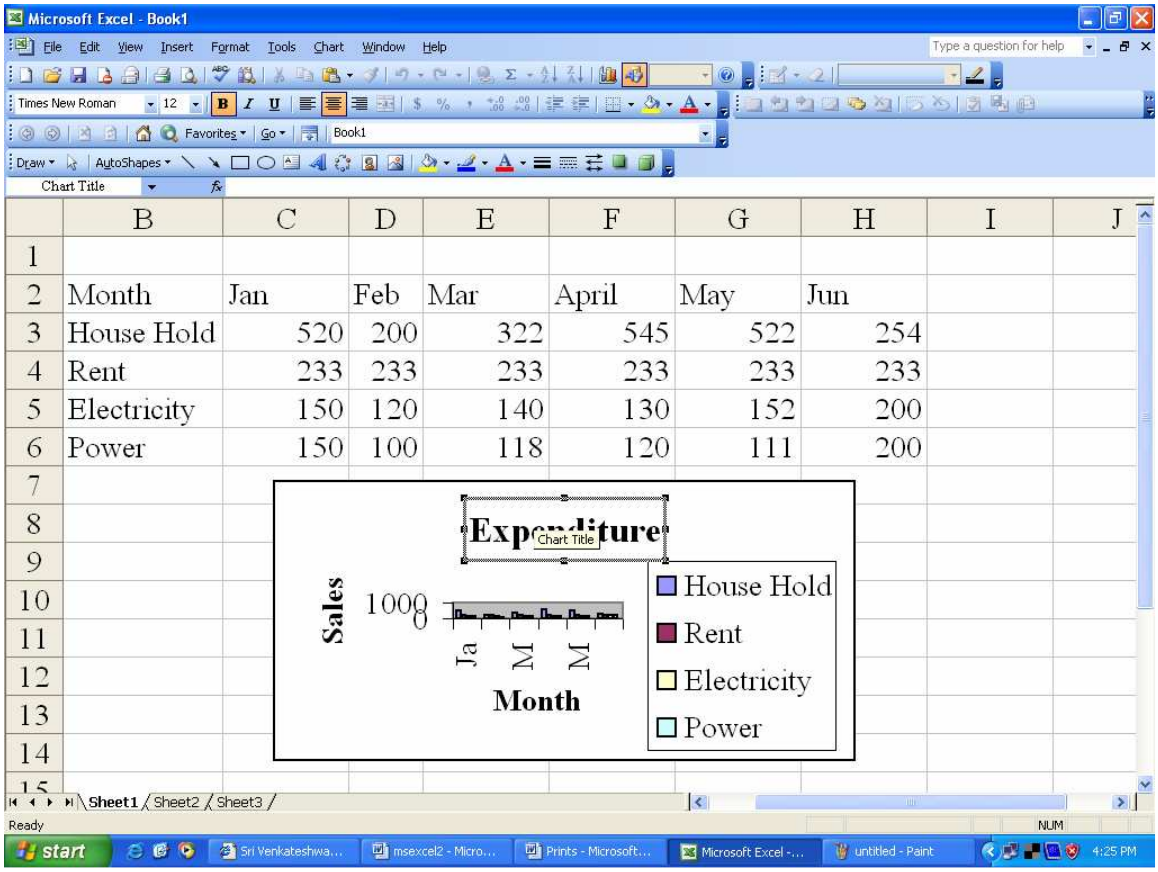
- While creating charts the step3 asks for **Chart heading, labels for X-axis and Y-axis**. You can define your own labels or click **Next** button so that the default values can be accepted.



- For example **Chart title** is *Expenditure*, **X-axis label** is *months* and
  Y-axis label is *Sales*

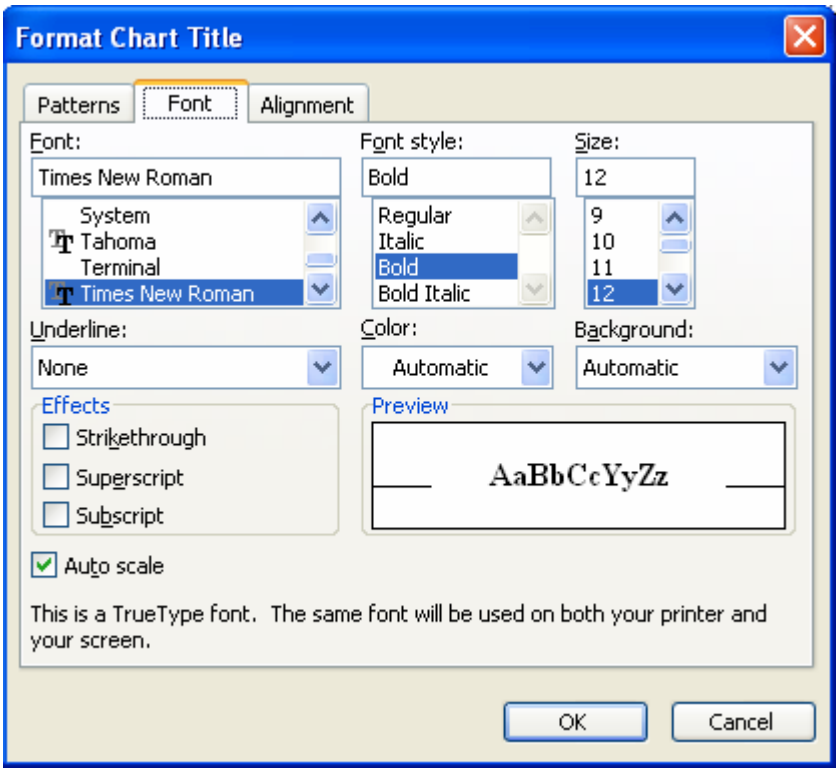
Task 7: Editing chart items

- Create the chart as shown below and save it as **cash4.xls**.



	B	C	D	E	F	G	H
1							
2	Month	Jan	Feb	Mar	April	May	Jun
3	House Hold	520	200	322	545	522	254
4	Rent	233	233	233	233	233	233
5	Electricity	150	120	140	130	152	200
6	Power	150	100	118	120	111	200

- Click the chart title(Expenditure). Selection markers(small black squares) will appear around the selected item.
- You can move or size the title in the same way that you can move or size a chart. Click the title box and drag it up by about one inch (3 cm), then release the mouse.
- You can format the title by selecting it, then right clicking and then selecting "**Format Chart Title**" from the drop down menu. You will get the below screen.

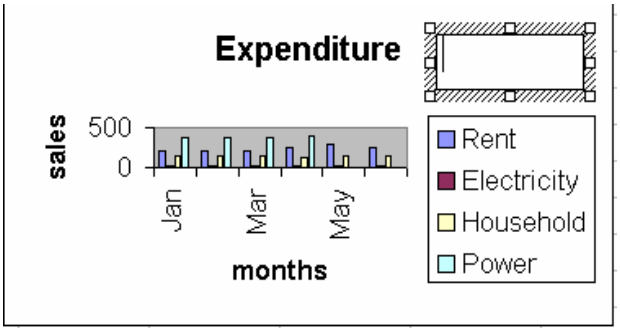


- You can select font type, font style and font size as shown above
- Click **OK**.

Task 8: Adding text to a chart

- Open **cash3.xls** worksheet.
- Click **View** menu, click **Toolbars**, **Drawing**.
- Click the **Text box** icon on the *Drawing toolbar*.

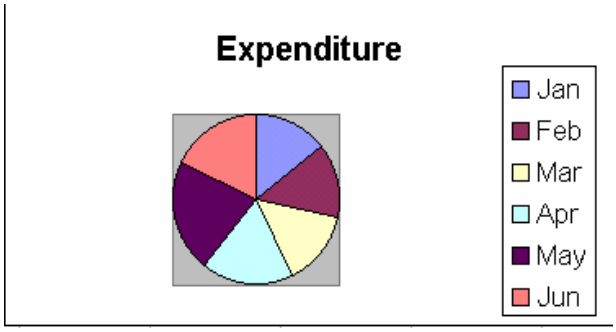
- Draw a **text box** inside the chart area as shown below



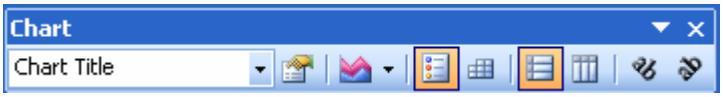
- Click inside the text box. A flashing text cursor will appear. Now type Household Expenditure
- You can use the same procedure for any other text that you want to appear in charts.

Task 9: Adding a legend to a chart

- Create a pie chart as shown below.



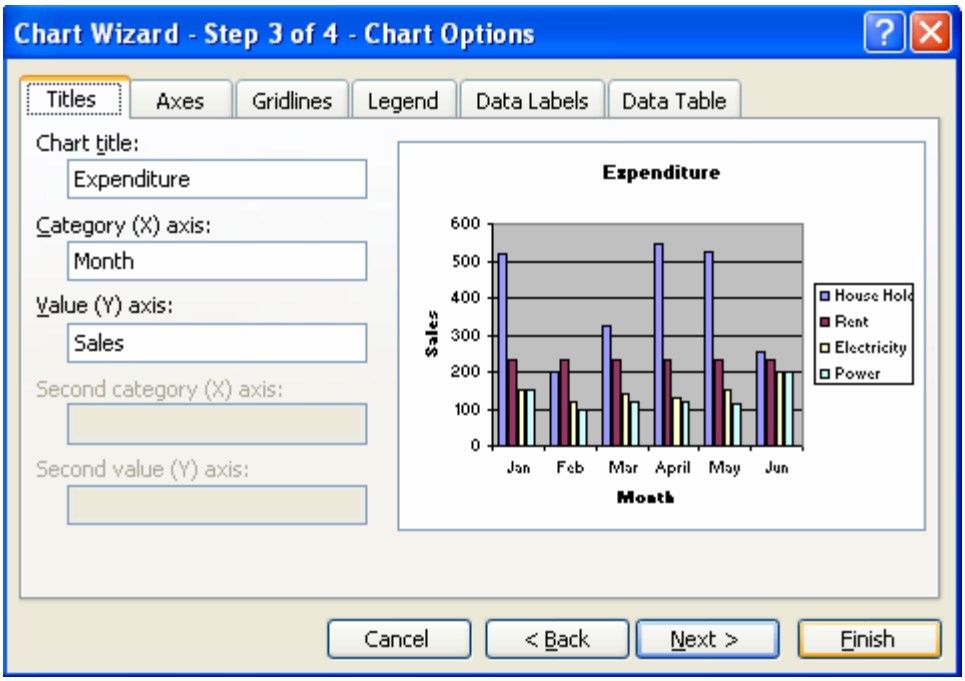
- Display the *Chart toolbar*, by dropping down the **view** menu and clicking **Toolbars, Chart**. In the above figure the legend is already added.
- Click inside the pie chart, then click once on the add or delete legend button on the Chart toolbar. The legend will be added if not already present and removed if it is currently present.



- You can also add or delete a legend from the **Chart**, **Chart options** menu

Task 10: Adding gridlines to a chart

- Open **cash3.xls** worksheet and change chart type to *Column chart*.
- Click **Chart**, **Chart options** to display this box.
- Click the **Gridlines tab** and tick the gridlines boxes required.



Task 11: Adding data labels to a chart

- Open **cash3** worksheet and change chart type to **pie chart**.
- Drop-down the **chart** menu and click **Chart options**.
- Click on the **Data Labels** tab.
- Click on **Show label and percent**. Your screen should look similar to this.