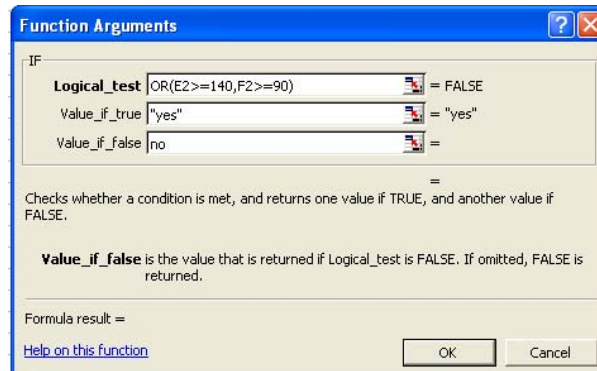


MICROSOFT EXCEL BY EXAMPLE II: HINTS

To insert a new sheet: right click on the Data sheet and [**Insert – Workbook**].

To display a status based on some criteria use IF function: [**Insert – Function – Search for a Function: IF**].

- Example for HT column:
 - Click on the cell corresponding to the HT status for the first patient and [**Insert – Function – Search for a Function: IF**].
 - Fill the IF function dialog box as in the image bellow:



- The OR operator is used because we have two conditions and if any one condition is accomplished the patient is considering to be with hypertension.

You can use Fill Down options to display the status of all other patients (see Hints from previous LAB).

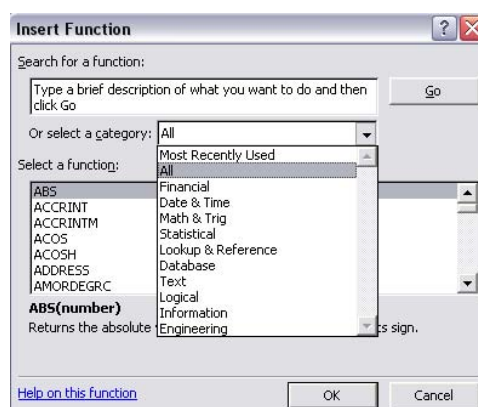
To move a column:

- Select the column that you want to move.
- Right click and Cut.
- Select the column to the right of where you want to move your selection.
- Right click and Insert Cut Cells...

A predefined functions could be copy also to the right, similar with filling the formulas down.

To use predefined function:

- Place the mouse in the cell where you want to obtain the result and from Insert menu choose **Function...** option



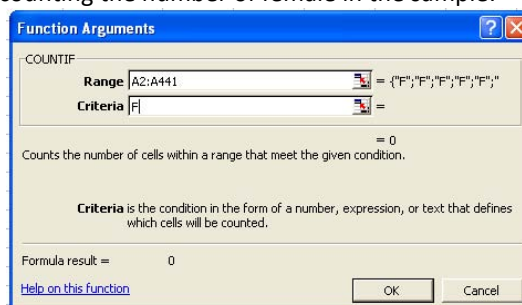
- From the “Select a function” window choose the function according with the following table:

Parameter name	Name of Predefine Function or Formula
Mean	=AVERAGE(array)
Median	=MEDIAN(array)
Mode	=MODE(array)
Minimum	=MIN(array)
Maximum	=MAX(array)
Central value	$= (X_{MAX} + X_{MIN}) / 2$
Range	$= (X_{MAX} - X_{MIN})$
Variance	=VAR(array)
Standard deviation	=STDEV(array)
Standard error	$= STDEV(array) / (SQRT(COUNT(array)))$
Coefficient of variance (CV)	$= STDEV(array) / AVERAGE(array)$
Skewness	=SKEW(array)
Kurtosis	=KURT(array)
quartile 1	=QUARTILE(ARRAY,1)
quartile 2	=QUARTILE(ARRAY,2)
quartile 3	=QUARTILE(ARRAY,3)

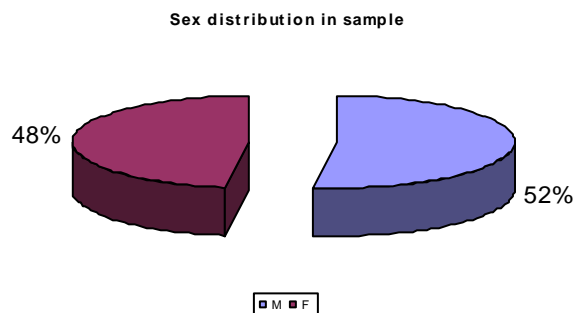
To create a PIE / BAR / COLUMN graphical representation:

Sex	
M	
F	

- Define how many entries are in each variable. Create a table with these entries. E.g.
- Count how many patients are for each entry. You can use COUNTIF predefine function.
 - Select to the array the column where you have the data for the variable.
 - Specify to the criteria used for counting.
 - E.g. for counting the number of female in the sample:



- Select the counts and labels and [**Insert – Chart – Standard Types – Pie**].
 - Choose one subtype of Pie.
 - Include the title as “Sex distribution in sample”.
 - Put the legend to the bottom. (step 3 on Chart Wizard – Legend).
 - Display the percentage on the graph (step 3 on Chart Wizard – Data Labels – Percentage).
 - The graphical representation will look like in the image bellow:

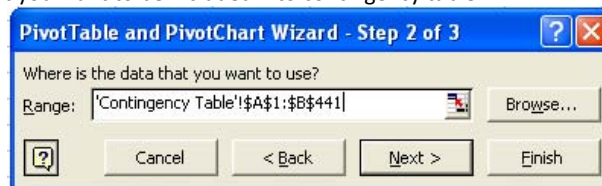


To create a contingency table:

- [Data – Pivot Table and Pivot Charts Report ...]
- Follow the steps as in the images bellow:



- Select the data that you want to be included into contingency table:



- Put the results into the Contingency Table sheet:



- Drop the date corresponding to the variable SMOKING on rows and the data corresponding to the HT variable on columns (drag and drop option). Drop the data of any variable at the intersection of columns and rows. Your contingency table will look like the one from the picture below:

Count of HT (yes/no)	HT (yes/no)		
SMOKING	no	yes	Grand Total
no	149	188	337
yes	49	54	103
Grand Total	198	242	440

- To draw the chart:

- Copy and paste the contingency table as in the image below:

SMOKING	no	yes
no	149	188
yes	49	54

- Rename the rows and columns as in the image below:

	HT=no	HT=yes
Smoking=no	149	188
Smoking=yes	49	54

- Select all data and **[Insert – Chart - Column]**. Your chart will look like the one in the image below:

