Electronic Spreadsheet

(Advanced)

Q1. What is Data Consolidation? What are the steps of Consolidating Data?

Ans. Data Consolidation is a process of collecting and integrating **(or Consolidating)** data from multiple sources into a single destination.

Steps of consolidating data are as under:

1. Prepare a Sheet 1, Sheet 2… so on, as per your requirements.

Days	Expenses
Day1	100
Day2	200
Day3	300
Day4	400
Day5	500
Day6	600
Day7	700

Sheet 1

Days	Expenses
Day1	1100
Day2	1200
Day3	1300
Day4	1400
Day5	1500
Day6	1600
Day7	1700

Sheet 2

2. Go to **Data** → **Consolidate**

3. Select **Function** of your Choice

4. In Consolidation Ranges add values that are to be added.

Example: **$Sheet1.$B$2:$B$8**

$Sheet2.$B$2:$B$8

5. Add destination sheet value in the **copy results to** option

Step 3

Step 4

Step 3

6. Select **OK**

Days	Expenses
Day1	1200
Day2	1400
Day3	1600
Day4	1800
Day5	2000
Day6	2200
Day7	2400

Sheet 3 (Final Sheet)
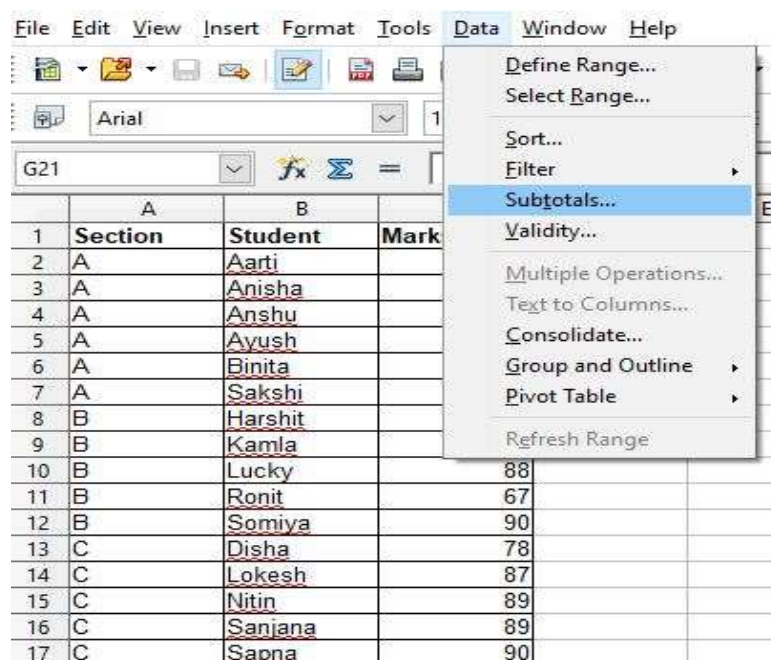
Q2. What is Subtotal? How to calculate subtotals?

Ans. For huge amount of data, totals and subtotals are very useful. Calc provides subtotal command that lets you calculate subtotals.

Steps for calculating subtotals:

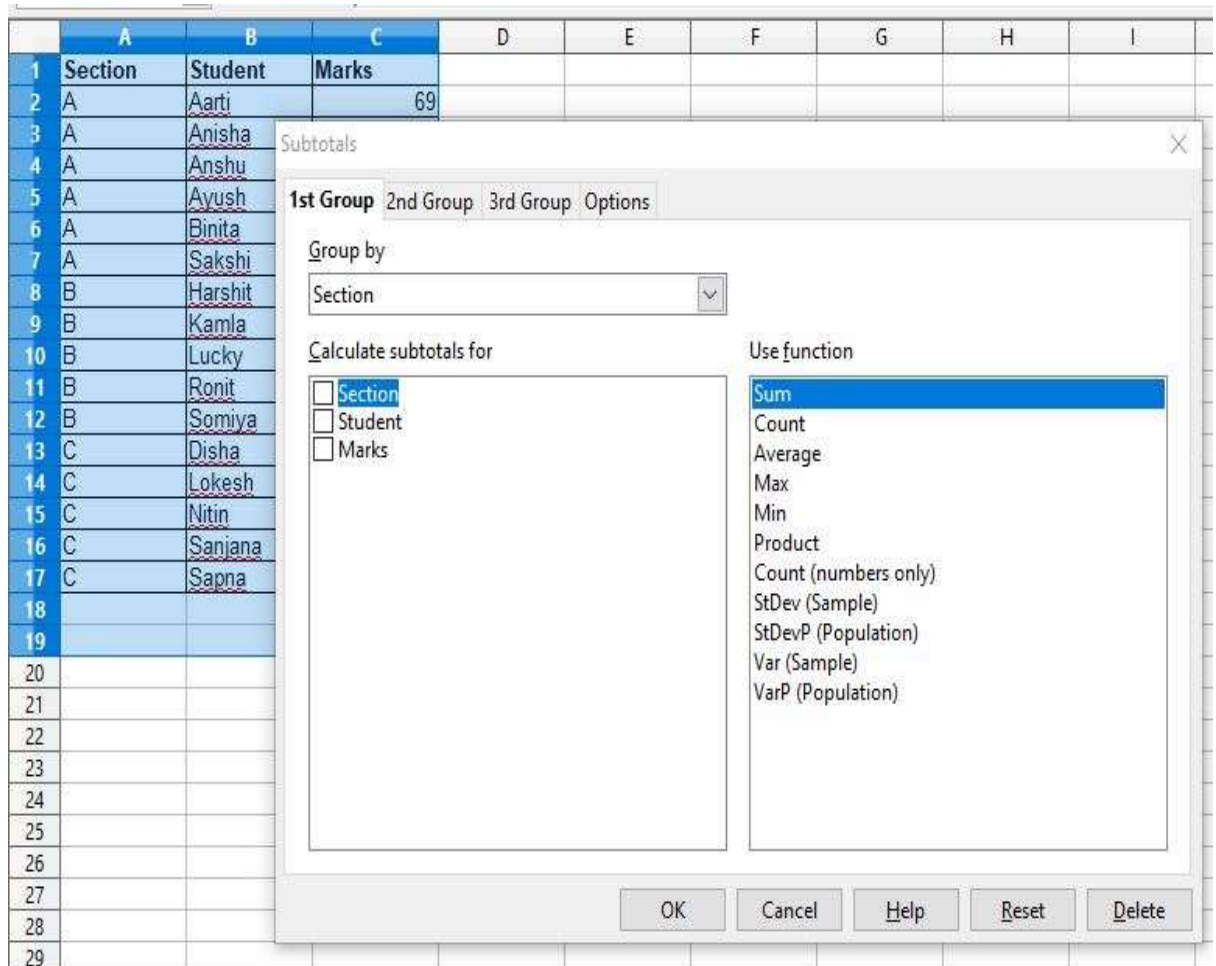**1.** Open the sheet having Data, whose subtotals are to be calculated.
2. Highlight Data

	A	B	C
1	Section	Student	Marks
2	A	Aarti	69
3	A	Anisha	67
4	A	Anshu	78
5	A	Ayush	78
6	A	Binita	89
7	A	Sakshi	90
8	B	Harshit	89
9	B	Kamla	89
10	B	Lucky	88
11	B	Ronit	67
12	B	Somiya	90
13	C	Disha	78
14	C	Lokesh	87
15	C	Nitin	89
16	C	Sanjana	89
17	C	Sapna	90

3. Select **Data -> Subtotals**

4. Select **Group by** field and **Calculate subtotals for**

5. Choose **User function** as per the preference.

6. Select **OK**

Q3. What is What-If Analysis? Which tools does OpenOffice provides for What-If-Analysis?

Ans. What-If-Analysis is the process of changing values in cells to see how these changes will affect the result of formulas in the worksheet.

Tools provided by OpenOfffice Calc for What-If-Analysis are as under:
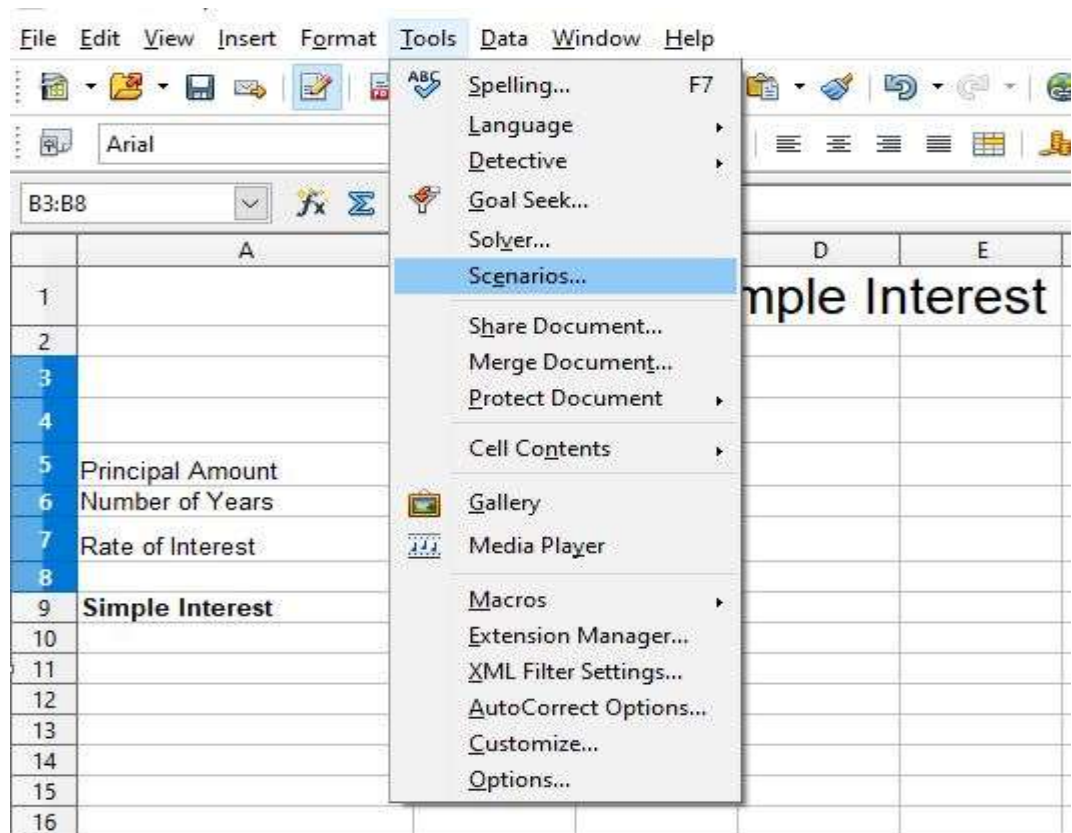
1. Scenarios

2. Goal Seek

3. Solver

1. Scenario tool helps in analysing the change of result in the formula for various cases.

Steps for creating scenarios are under:

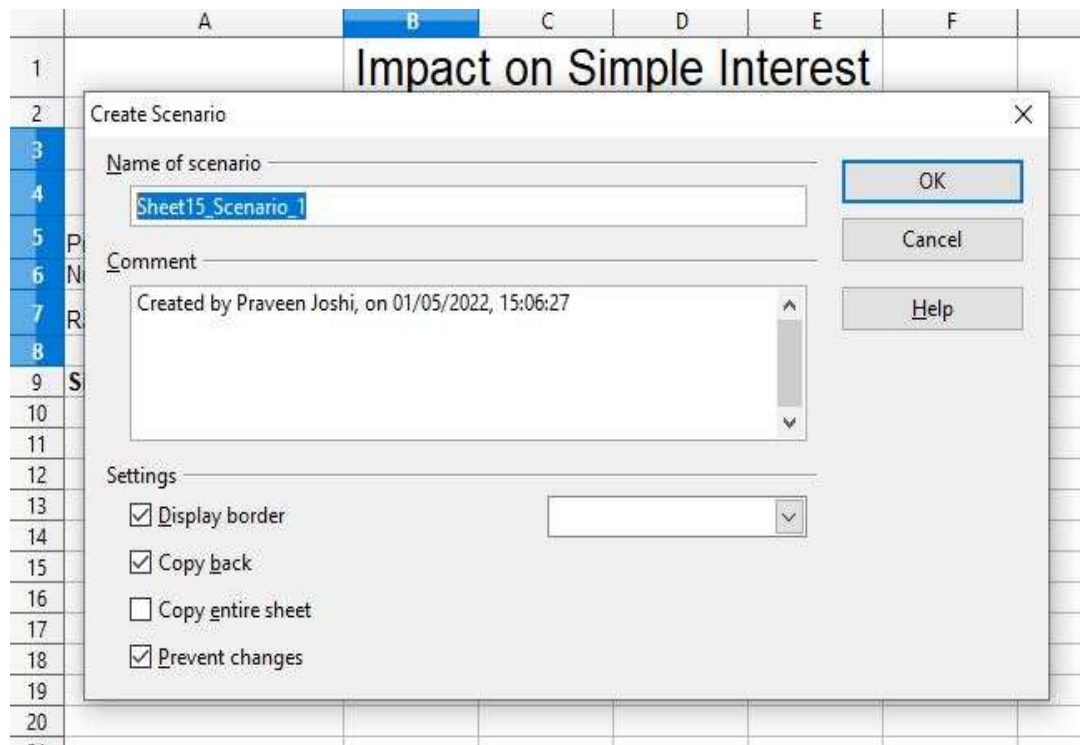I.   Select cells whose values are to be changed (**Using Ctrl Key**)

Impact on Simple Interest	
Principal Amount	70000
Number of Years	5
Rate of Interest	12.00%
Simple Interest	420

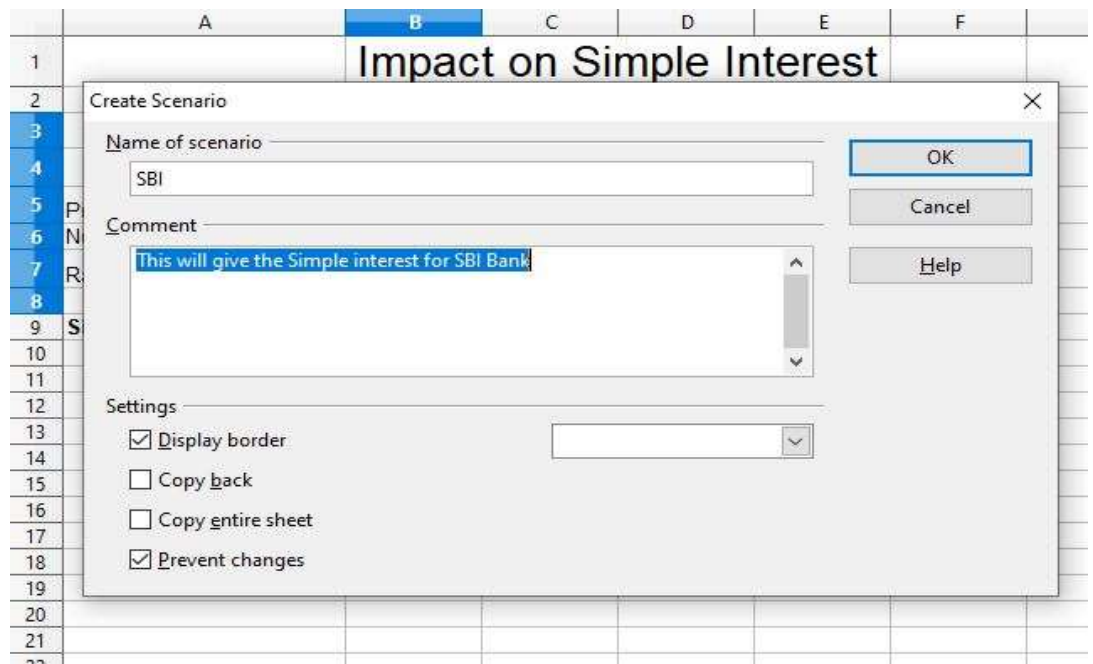**II.** Go to Command **Tools -> Scenarios**

III. In the **Create Scenario** Window:

    a. Give the name of Scenario accordingly

b. Write text in the **Comment** Option (It is an Optional Step)

c. Also, in the **Settings** uncheck the **Copy back** option.

IV. Create more scenarios as per your requirement by following step 1 to 3.

Impact on Simple Interest

	SBI ⬇
Principal Amount	70000
Number of Years	5
Rate of Interest	12.00%
Simple Interest	420

Scenario 1: SBI

Impact on Simple Interest

	UGB ⬇
Principal Amount	70000
Number of Years	7
Rate of Interest	12.00%
Simple Interest	588

Scenario 2: UGB

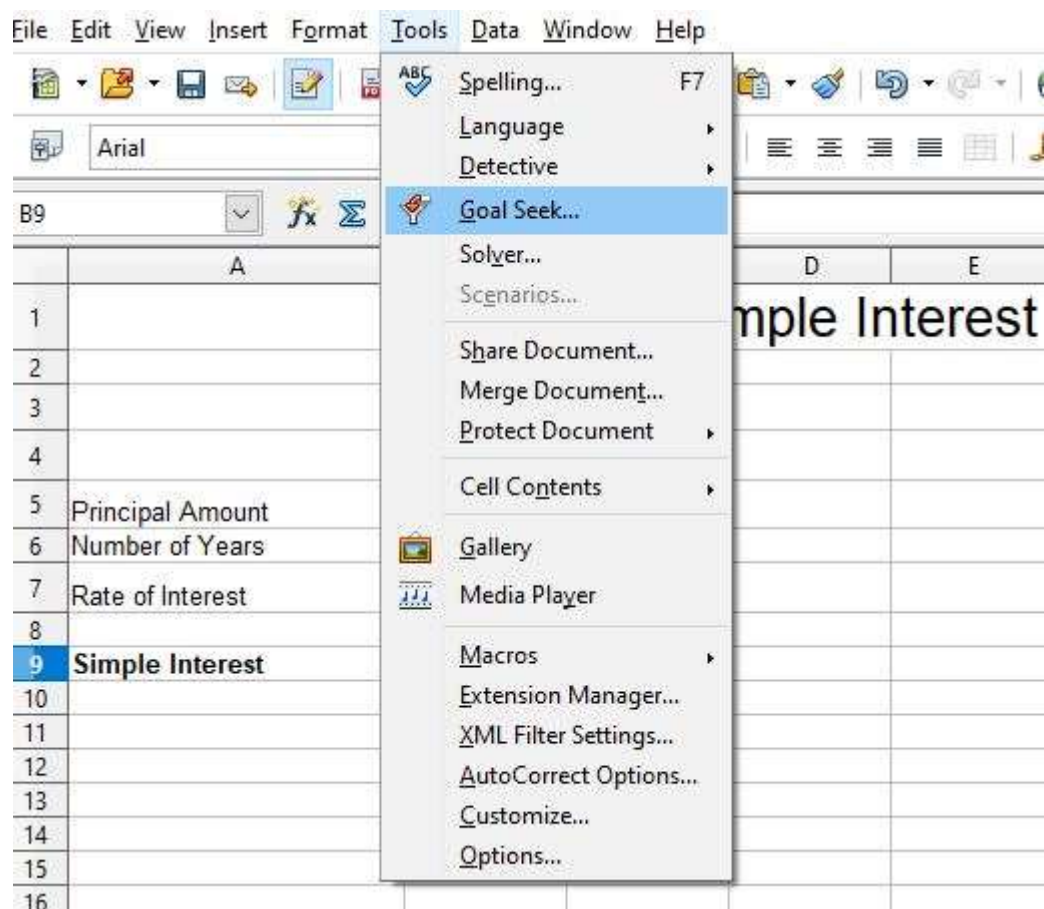**V.** Now observe the change in the output of formula cell.

For example: Here **Scenario 1** gives Simple Interest for SBI

And **Scenario 2** gives Simple Interest for UGB

2. Goal Seek is the **back-solving** tool. It is one another **what-if-analysis**

tool made available by OpenOffice Calc.
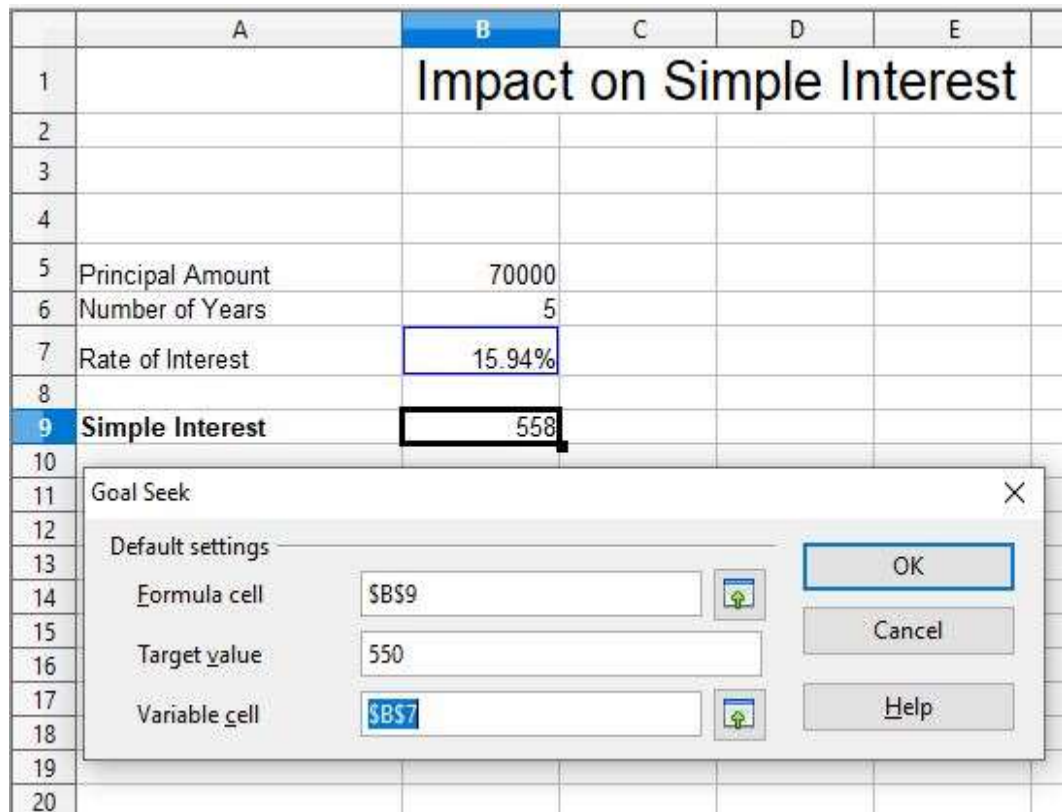
- It obtains input for an output.

Steps for implementing Goal Seek are as under:

I. Go to **Tools -> Goal Seek**

II. In the **Goal Seek dialog box**:
   a. Enter address of the cell in the **Formula Cell**
   b. Give your **Target Value**
   c. Enter address in the **Variable Cell**, whose value you want to find out.

III. Click **OK**

IV. Click **Yes** for **Goal Seek Successful** to obtain value that you want to find out.

	A	B	C	D	E
1		Impact on Simple Interest			
2					
3					
4					
5	Principal Amount	70000			
6	Number of Years	5			
7	Rate of Interest	15.94%			
8					
9	**Simple Interest**	558			
10					

Goal Seek ✕

Default settings

Formula cell

Target value

Variable cell

OpenOffice Calc ✕

Goal Seek successful.
Insert result (15.71%) into current cell?

Yes | No

OK

Cancel

Help

	A	B	C	D	E
1		Impact on Simple Interest			
2					
3					
4					
5	Principal Amount	70000			
6	Number of Years	5			
7	Rate of Interest	15.71%			
8					
9	**Simple Interest**	550			
10					
11					
12					
13					

Value Changed from 15.94% to 15.71%

3. Solver is an advanced form of **Goal Seek** tool. It is one another **what-if-analysis tool** that deals with equations having **multiple unknown variables.**

It obtains multiple inputs from an output.