MS Excel 2007

Question 6

Charts

1. **Create an electronic spread sheet which shows the sales of different products for 5 years. Create column chart for the following data**

Year	Product_1	Product_2	Product_3	Product_4
2010	1000	800	900	1000
2011	800	80	500	900
2012	1200	190	400	800
2013	400	200	300	1000
2014	1800	400	400	1200

Creating the spread with different products of 5 year

Before you can make a chart, you must first enter data into a worksheet. To create the spread sheet with 5 years different products follow the below steps

Step1:

Click on the cell B1 and type "Product_1" and go to the next cell by clicking the Tab key on the keyboard.

Step 2:

In the cell C1 type "Product_2" and click on tab key to activate next cell. Repeat the above to steps to enter "Product_3", "Product_4"

Step3:

Click on cell "A2" and type "2010" then press on tab key to activate the next cell.

Step 4:

Repeat the above procedure to enter the details of four products for five years. Finally we have the data of products as follows

D15 f_x

	A	B	C	D	E
1		Product_1	Product_2	Product_3	Product_4
2	2010	1000	800	900	1000
3	2011	800	80	500	900
4	2012	1200	190	400	800
5	2013	400	200	300	1000
6	2014	1800	400	400	1200

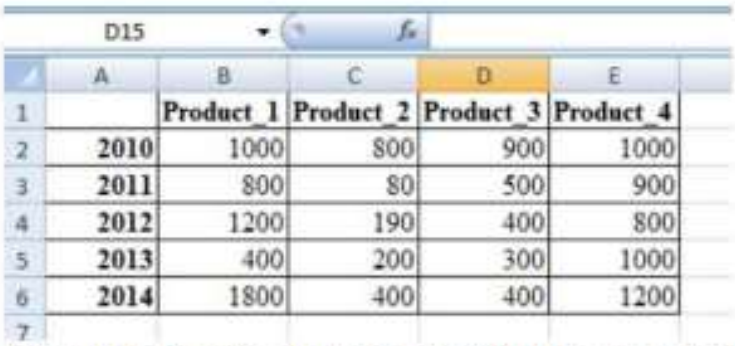
Creating a Column chart for the above data

Definition of Chart:

Charts allow you to present data entered into the worksheet in a visual format using a variety of graph types.

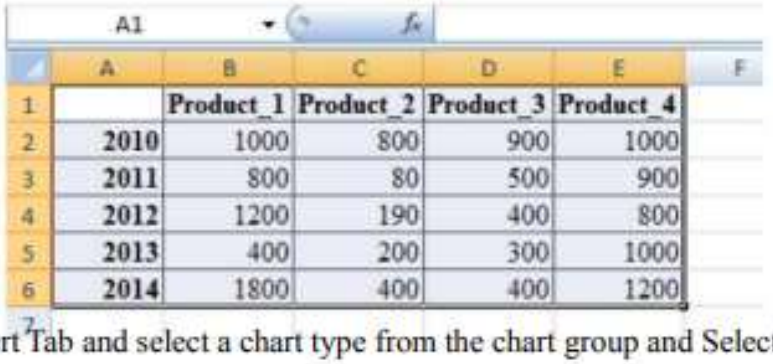
Following steps are given to draw a Chart

1. Enter data in the work sheet: Suppose you entered data as given in below



	A	B	C	D	E
1		Product_1	Product_2	Product_3	Product_4
2	2010	1000	800	900	1000
3	2011	800	80	500	900
4	2012	1200	190	400	800
5	2013	400	200	300	1000
6	2014	1800	400	400	1200
7					

2. Now select data range: By using the mouse high light the range of data you want to take

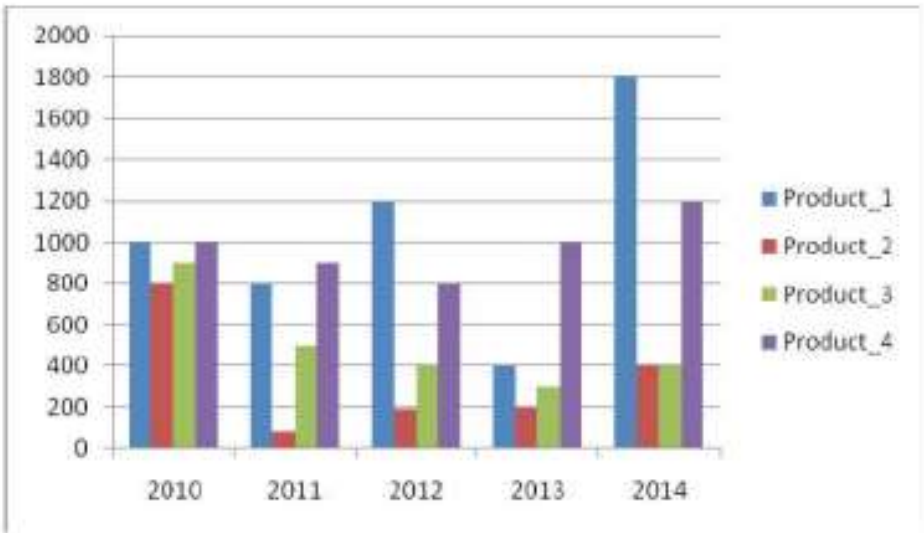


	A	B	C	D	E	F
1		Product_1	Product_2	Product_3	Product_4	
2	2010	1000	800	900	1000	
3	2011	800	80	500	900	
4	2012	1200	190	400	800	
5	2013	400	200	300	1000	
6	2014	1800	400	400	1200	
7						

3. Click Insert Tab and select a chart type from the chart group and Select the sub type of chart (In this example selected a 2D Column chart)

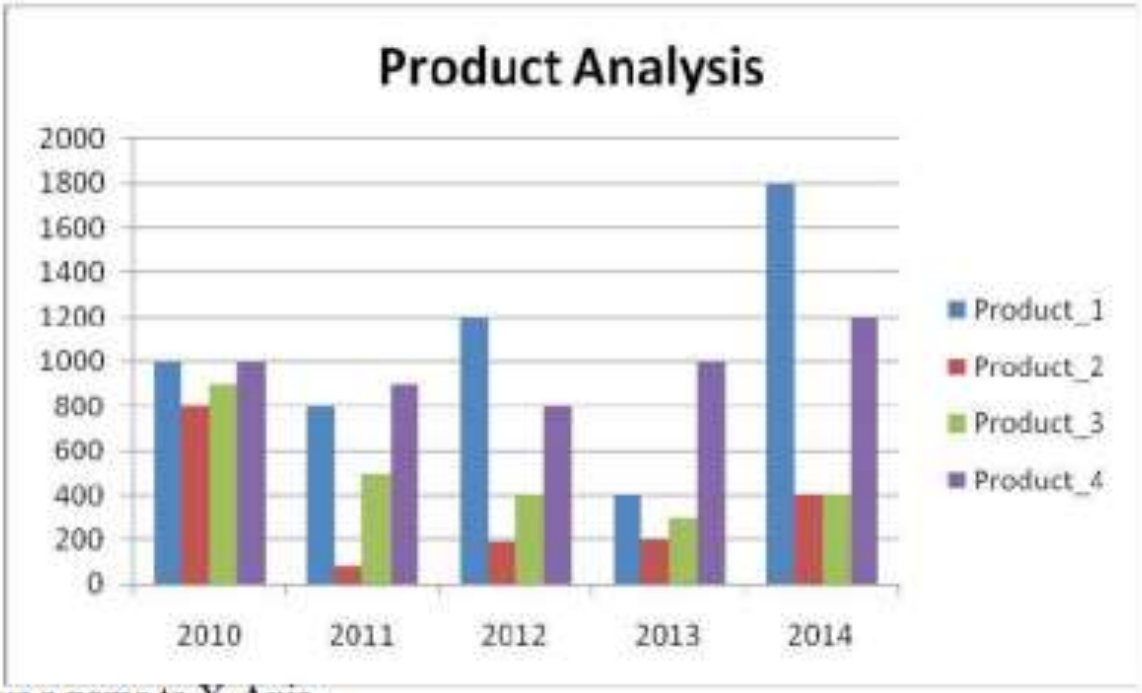
Insert --> Chart Group -->Select Column Chart

4. The Chart will be displayed as follows



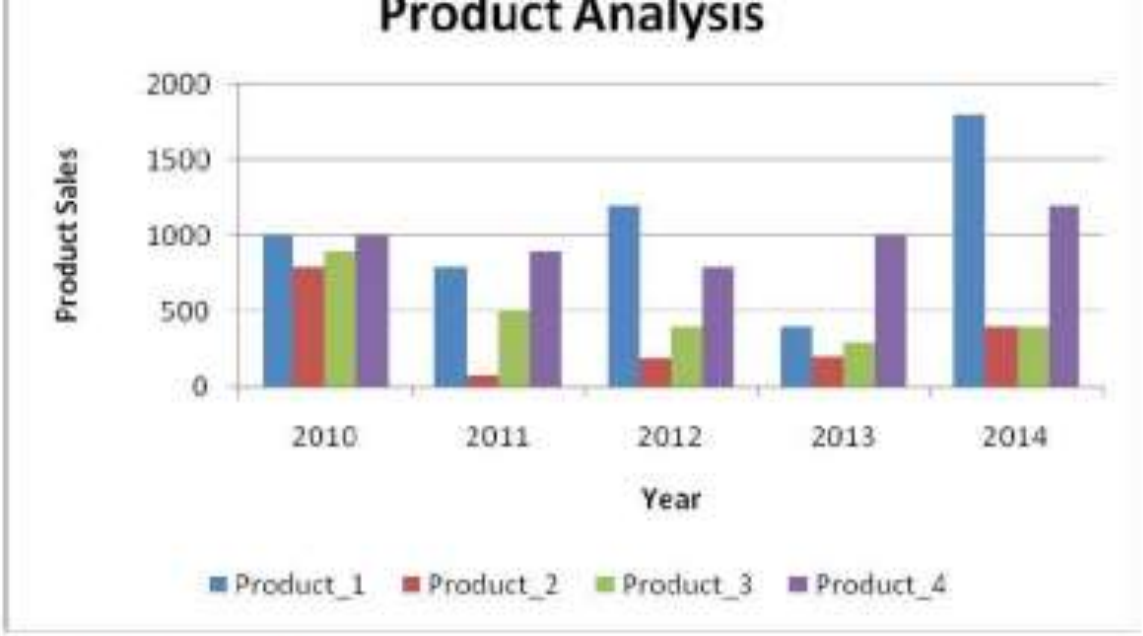
5. Select the Title of the chart
   - To give a title to a chart, click on the chart. Now you can see layout tab available. Click on Layout tab.
   - Choose(click) on chart title option available in the Label group
   - Click on the chart title and write a title "Product Analysis".

Select Chart--> Layout-->Chart Title



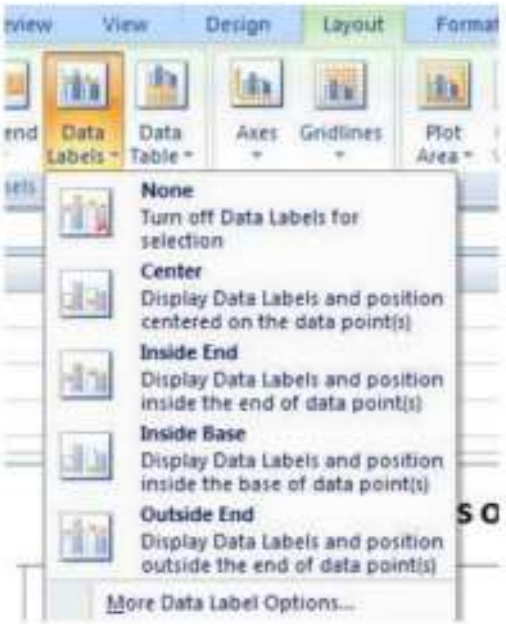
6. Give a name to X-Axis
   - Click on Layout tab.
   - Then select Axis Titles from Labels Group.
   - Select Primary Horizontal Axis Title, as shown below.
   - Now, click on the Axis Title and write an X-axis title "Year".
   - Follow the same steps to give a title to Y-axis "Product Sales".

Select Chart-->Layout-->Axis Title-->Primary Horizontal Axis Title

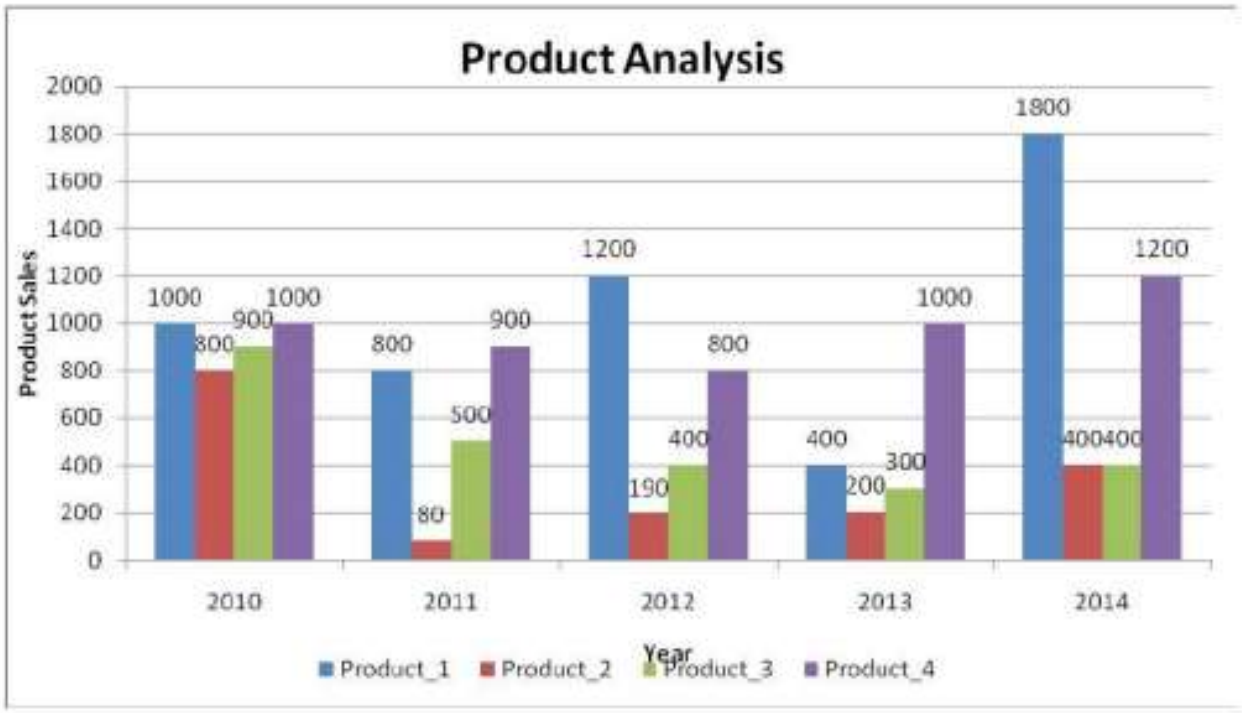


7. Adding Data Labels to the chart
   - Click on Layout tab.
   - Then click on Data Label option available in Labels Group.

   - Now choose a format to display data labels



Output:


Product Analysis
Product Sales
2000
1800
1600
1400
1200
1000
800
600
400
200
0
1000
800
900
1000
800
80
500
900
1200
190
400
800
400
200
300
1000
1800
400
400
1200
2010
2011
2012
2013
2014
Year
Product_1
Product_2
Product_3
Product_4

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Question 7

Grade of a Student

2. **Create a suitable examination data base and find the sum of the marks(total) of each Student and respective class secured by the student**

Rules

- **Pass if marks in each subject > = 35,**
- **Distinction if average>=70,**
- **First class if average>=60 but <70,**
- **Second class if average >=50 but <60,**
- **Third class if average>=35 and but <50 ,**
- **Fail if marks in any subject is <35 .**

Display average marks of the class, subject wise and pass percentage

Solution:

To find the grade of a student we need to follow the following steps

Step 1: Typing Student database in Excel 2007

Type the student database with the required fields starts from A1 cell as follows

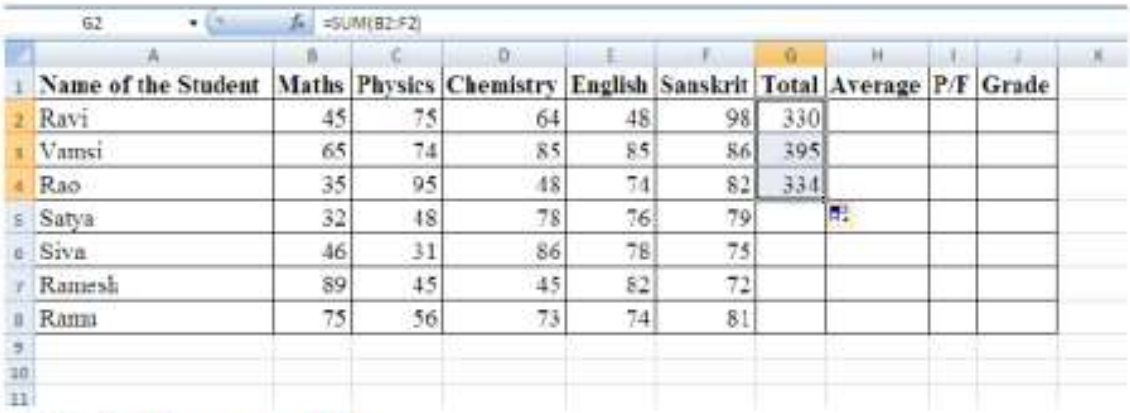
	A	B	C	D	E	F	G	H	I	J	K
1	Name of the Student	Maths	Physics	Chemistry	English	Sanskrit	Total	Average	P/F	Grade	
2	Ravi	45	75	64	48	98					
3	Vamsi	65	74	85	85	86					
4	Rao	35	95	48	74	82					
5	Satya	32	48	78	76	79					
6	Siva	46	31	86	78	75					
7	Ramesh	89	45	45	82	72					
8	Ramu	75	56	73	74	81					
9											
10											
11											
12											

Step 2: To find Total Marks of Student

To find the total marks of a student click on the cell "G2" and type the following formula

```
=SUM(B2:F2)
```

To find the total marks for the remaining students select "G2" cell and drag down to the remaining students.



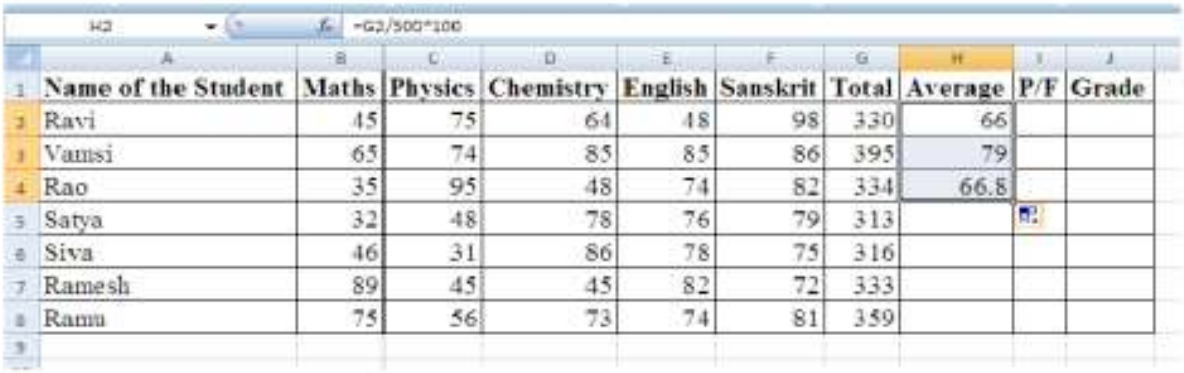
	A	B	C	D	E	F	G	H	I	J
1	Name of the Student	Maths	Physics	Chemistry	English	Sanskrit	Total	Average	P/F	Grade
2	Ravi	45	75	64	48	98	330			
3	Vamsi	65	74	85	85	86	395			
4	Rao	35	95	48	74	82	334			
5	Satya	32	48	78	76	79				
6	Siva	46	31	86	78	75				
7	Ramesh	89	45	45	82	72				
8	Ramu	75	56	73	74	81				
9										
10										
11										

Step 3: To find Average marks

To find the average marks of the student click on the cell "H2" and type the following formula

```
=G2/500*100
```

To find the average marks for the remaining students select "H2" cell and drag down to the all the students.



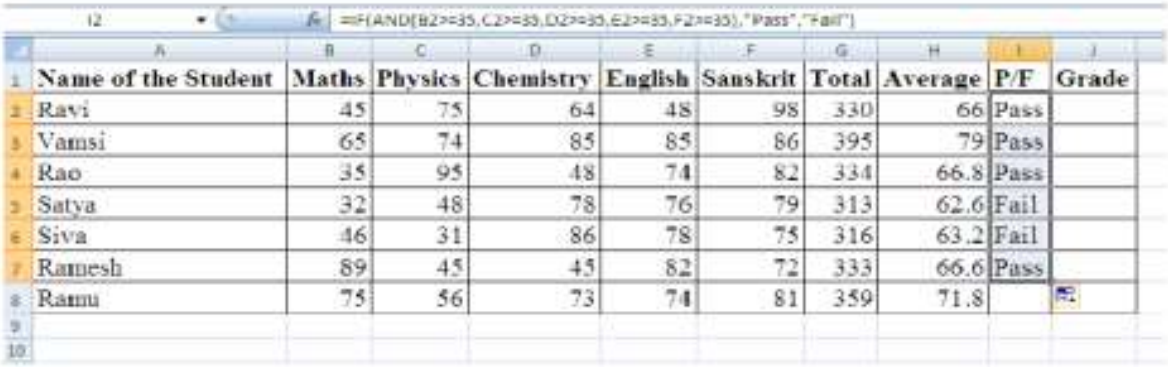
	A	B	C	D	E	F	G	H	I	J
1	Name of the Student	Maths	Physics	Chemistry	English	Sanskrit	Total	Average	P/F	Grade
2	Ravi	45	75	64	48	98	330	66		
3	Vamsi	65	74	85	85	86	395	79		
4	Rao	35	95	48	74	82	334	66.8		
5	Satya	32	48	78	76	79	313			
6	Siva	46	31	86	78	75	316			
7	Ramesh	89	45	45	82	72	333			
8	Ramu	75	56	73	74	81	359			
9										

Step4: To Check Pass or Fail

To check whether the student is Pass or Fail select the cell "I2" and type the following formula

```
=IF(AND(B2>=35,C2>=35,D2>=35,E2>=35,F2>=35),"Pass","Fail")
```

To check the remaining students are Pass/Fail select the cell "I2" and drag down to all the students



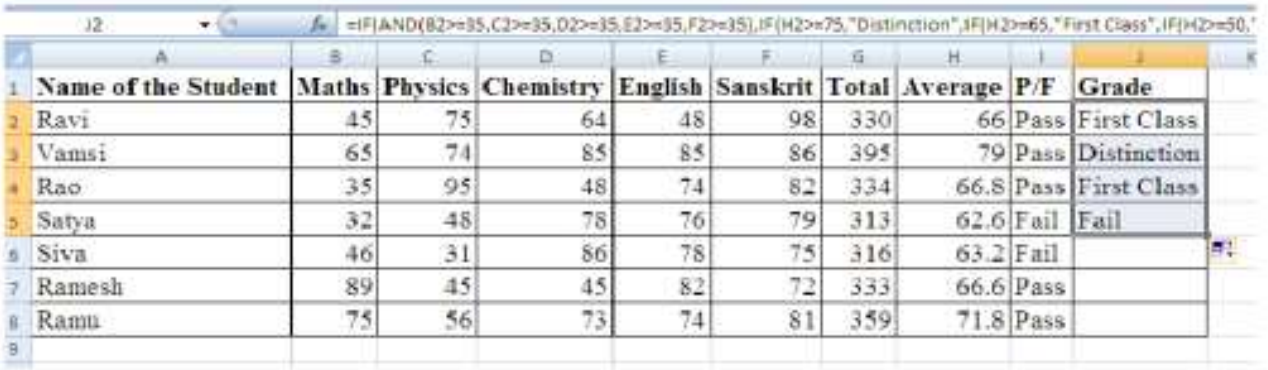
	Name of the Student	Maths	Physics	Chemistry	English	Sanskrit	Total	Average	P/F	Grade
2	Ravi	45	75	64	48	98	330	66	Pass	
3	Vamsi	65	74	85	85	86	395	79	Pass	
4	Rao	35	95	48	74	82	334	66.8	Pass	
5	Satya	32	48	78	76	79	313	62.6	Fail	
6	Siva	46	31	86	78	75	316	63.2	Fail	
7	Ramesh	89	45	45	82	72	333	66.6	Pass	
8	Ramu	75	56	73	74	81	359	71.8		

Step 5: To find Grade

To find the grade of a student click on the cell "J2" and type the following formula

```
=IF(AND(B2>=35,C2>=35,D2>=35,E2>=35,F2>=35),IF(H2>=75,"Distinction",IF(H2>=65,"First Class",IF(H2>=50,"Second Class",IF(H2>=35,"Third Class")))),"Fail")
```

To find the grade for the remaining students select "J2" cell and drag down to the all the students



	Name of the Student	Maths	Physics	Chemistry	English	Sanskrit	Total	Average	P/F	Grade
2	Ravi	45	75	64	48	98	330	66	Pass	First Class
3	Vamsi	65	74	85	85	86	395	79	Pass	Distinction
4	Rao	35	95	48	74	82	334	66.8	Pass	First Class
5	Satya	32	48	78	76	79	313	62.6	Fail	Fail
6	Siva	46	31	86	78	75	316	63.2	Fail	
7	Ramesh	89	45	45	82	72	333	66.6	Pass	
8	Ramu	75	56	73	74	81	359	71.8	Pass	

Finally we get the following student database with total, average and grade

output

Name of the Student	Maths	Physics	Chemistry	English	Sanskrit	Total	Average	P/F	Grade
Ravi	45	75	64	48	98	330	66	Pass	First Class
Vamsi	65	74	85	85	86	395	79	Pass	Distinction
Rao	35	95	48	74	82	334	66.8	Pass	First Class
Satya	32	48	78	76	79	313	62.6	Fail	Fail
Siva	46	31	86	78	75	316	63.2	Fail	Fail
Ramesh	89	45	45	82	72	333	66.6	Pass	First Class
Ramu	75	56	73	74	81	359	71.8	Pass	First Class
Raju	64	78	84	65	87	378	75.6	Pass	Distinction

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MS-EXCEL

8 . Create a worksheet named Patient to include the following

Patient No	Patient Name	In-Patient or Out-Patient	Doctor attended	Date

Add 5 rows .

9. Create a worksheet with the days of the week at the top and time from 9.00

To 17.00 in intervals of 30 minutes (9.00, 9.30, 10.00,..... 17.00) use Auto fill feature to create this worksheet

10 . Create the following **Student** worksheet

SNo	Name	Mark1	Marks2	Mark3	Mark4	Mark5	Total

Using Auto Sum calculate the total marks.

11 . In above table find Maximum and Minimum marks in columns mark1, mark2, mark3, mark4 and total.

12 . Prepare a worksheet showing employee code, employee name and designation of the software engineers working in a company XYZ. The employee code starts with increments by one for engineer and ends with 1007. Use series fill option and fill code. Also insert today's date on the top of the worksheet.

13 . Select student worksheet, sort the data in the descending order of total using sort option. Using filter option, filter irrelevant data.

Create the following worksheet Salary (Enter at least 5 records)

Name	Basic	HRA	TA	Deductions	Gross Pay	Tax	Net Pay

Calculations are done as follows:

HRA - 50% of Basic; TA – 10% of Basic;

Assume your deductions

Gross Pay is Basic + HRA+TA-Deductions

Tax is 30% of Gross Pay

Net Pay is Gross Pay –Tax

14 . In above table find the average (or mean) salary, count of employees getting less than average salary.

15. create a bar graph for the above data

16 . Create an exploded pie chart with 3-D visual effect using above data.

17 . Create a column chart of employees Net Pay.

18 . Create the following worksheet that shows the number of planes arriving in an airport in the morning (AM) arrivals and in the afternoon (PM).

Day	AM Arrivals	PM Arrivals
Monday	80	40
Tuesday	65	45
Wednesday	50	75
Thursday	58	60
Friday	150	80
Saturday	40	68
Sunday	30	100

Prepare a line graph showing the daily arrivals for both AM and PM.

19 . Prepare two pie charts showing the relative distribution of arrivals in the morning and the afternoon.

20. Prepare a component bar chart showing the AM and PM arrivals versus the day of the week.