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Experiment 1

Practical of reading and writing different types of datasets

a) Read data from given student data excel file.

In [31]:

```
import pandas as pd
d=pd.read_excel('students_data.xlsx')
ds=pd.DataFrame(d)
ds
```

Out[31]:

	Roll No	Name	c	c++	java	python	web_technology
0	1	Atharva	78	90	65	98	78
1	2	Anjali	67	99	66	56	65
2	3	Vinod	98	78	78	76	87
3	4	Praniket	77	56	45	77	56
4	5	Rakesh	98	78	76	98	98
5	6	Akash	90	65	73	65	89
6	7	Namrata	76	76	92	83	78
7	8	Suchita	56	88	90	71	85
8	9	Siddhant	67	77	72	63	59
9	10	Shubham	78	68	75	52	67

b) Calculate total of marks and write total into excel file.

In [29]:

```
ds['Total']=ds['c']+ds['c++']+ds['java']+ds['python']+ds['web_technology']
```

In [30]:

ds

Out[30]:

	Roll No	Name	c	c++	java	python	web_technology	Total
0	1	Atharva	78	90	65	98	78	409
1	2	Anjali	67	99	66	56	65	353
2	3	Vinod	98	78	78	76	87	417
3	4	Praniket	77	56	45	77	56	311
4	5	Rakesh	98	78	76	98	98	448
5	6	Akash	90	65	73	65	89	382
6	7	Namrata	76	76	92	83	78	405
7	8	Suchita	56	88	90	71	85	390
8	9	Siddhant	67	77	72	63	59	338
9	10	Shubham	78	68	75	52	67	340

c) Demonstrate how to read data from given csv file.

In [2]:

```
import pandas as pd
df=pd.read_csv('tips.csv')
df
```

Out[2]:

	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4
...
239	29.03	5.92	Male	No	Sat	Dinner	3
240	27.18	2.00	Female	Yes	Sat	Dinner	2
241	22.67	2.00	Male	Yes	Sat	Dinner	2
242	17.82	1.75	Male	No	Sat	Dinner	2
243	18.78	3.00	Female	No	Thur	Dinner	2

244 rows × 7 columns

d) Write data in excel file to csv file.

In [4]:

```
import pandas as pd
data = pd.read_excel('students_data.xlsx')
data.to_csv('output_file.csv', index=False)
new=pd.read_csv('output_file.csv')
new
```

Out[4]:

	Roll No	Name	c	c++	java	python	web_technology
0	1	Atharva	78	90	65	98	78
1	2	Anjali	67	99	66	56	65
2	3	Vinod	98	78	78	76	87
3	4	Praniket	77	56	45	77	56
4	5	Rakesh	98	78	76	98	98
5	6	Akash	90	65	73	65	89
6	7	Namrata	76	76	92	83	78
7	8	Suchita	56	88	90	71	85
8	9	Siddhant	67	77	72	63	59
9	10	Shubham	78	68	75	52	67