

```
In [1]: import pandas as pd
mydata={
    'Temperature': [25, 26, 27, 28, 29, 30, 31, 32, 33, 34],
    'Pressure': [1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010]
}
df=pd.DataFrame(mydata)
print(df)
```

	Temperature	Pressure
0	25	1001
1	26	1002
2	27	1003
3	28	1004
4	29	1005
5	30	1006
6	31	1007
7	32	1008
8	33	1009
9	34	1010

```
In [2]: df.to_csv('temp.csv')
```

```
In [4]: pd.read_csv('temp.csv')
```

Out[4]:

	Unnamed: 0	Temperature	Pressure
0	0	25	1001
1	1	26	1002
2	2	27	1003
3	3	28	1004
4	4	29	1005
5	5	30	1006
6	6	31	1007
7	7	32	1008
8	8	33	1009
9	9	34	1010

In [5]: df.head(3)

Out[5]:

	Temperature	Pressure
0	25	1001
1	26	1002
2	27	1003

In [6]: df.tail(3)

Out[6]:

	Temperature	Pressure
7	32	1008
8	33	1009
9	34	1010

In [7]: df.describe()

Out[7]:

	Temperature	Pressure
count	10.00000	10.00000
mean	29.50000	1005.50000
std	3.02765	3.02765
min	25.00000	1001.00000
25%	27.25000	1003.25000
50%	29.50000	1005.50000

count	10.00000	10.00000
mean	29.50000	1005.50000
std	3.02765	3.02765
min	25.00000	1001.00000
25%	27.25000	1003.25000
50%	29.50000	1005.50000
75%	31.75000	1007.75000
max	34.00000	1010.00000

In [8]: df.shape

Out[8]: (10, 2)

In [9]: df.columns

Out[9]: Index(['Temperature', 'Pressure'], dtype='object')

In [10]: df.info()

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 10 entries, 0 to 9
Data columns (total 2 columns):
#   Column      Non-Null Count  Dtype
---  ---
0   Temperature  10 non-null    int64
1   Pressure     10 non-null    int64
dtypes: int64(2)
memory usage: 292.0 bytes
```

```
In [11]: mark1 = pd.Series([80, 85, 90, 75, 95])
mark2 = pd.Series([70, 88, 92, 79, 85])

#addition
a=mark1+mark2
print("addition:\n",a)

#substraction
b=mark1-mark2
print("substraction:\n",b)

#multiplication
c=mark1*mark2
print("multiplication:\n",c)

#division
d=mark1/mark2
print("division:\n",d)
```

```
addition:
0    150
1    173
2    182
3    154
4    180
dtype: int64
substraction:
0     10
1     -3
2     -2
3     -4
4     10
dtype: int64
```

```
dtype: int64
multiplication:
0    5600
1    7480
2    8280
3    5925
4    8075
dtype: int64
division:
0    1.142857
1    0.965909
2    0.978261
3    0.949367
4    1.117647
dtype: float64
```

```
In [12]: student_info={
'Name' : ['Vaishu','Sakshi','Pranju','gomti','manshi',
'Pallavi','Ruchika','Saloni','Sahatsh','Tanishq'],
'Roll No.' : [15,34,12,32,43,13,67,45,9,78],
'Marks' : [87,78,79,89,87,60,88,68,79,80]
}
df=pd.DataFrame(student_info)
print(df)
```

File Edit View Insert Cell Kernel Widgets Help








 Run
 


Code



	Name	Roll No.	Marks
0	Vaishu	15	87
1	Sakshi	34	78
2	Pranju	12	79
3	gomti	32	89
4	mansi	43	87
5	Pallavi	13	60
6	Ruchika	67	88
7	Saloni	45	68
8	Sahatsh	9	79
9	Tanishq	78	80

In [20]: `df.to_csv('student.csv')`

In [21]: `pd.read_csv('student.csv')`

File Edit View Insert Cell Kernel Widgets Help





 Run
 


Code

Out[21]:

	Unnamed: 0	Name	Roll No.	Marks
0	0	Vaishu	15	87
1	1	Sakshi	34	78
2	2	Pranju	12	79
3	3	gomti	32	89
4	4	mansi	43	87
5	5	Pallavi	13	60
6	6	Ruchika	67	88
7	7	Saloni	45	68
8	8	Sahatsh	9	79
9	9	Tanishq	78	80

In [22]: `df.head()`

Out[22]:

	Name	Roll No.	Marks
0	Vaishu	15	87
1	Sakshi	34	78
2	Pranju	12	79
3	gomti	32	89
4	mansi	43	87

File Edit View Insert Cell Kernel Widgets Help








 Run
 


 Code

In [23]: df.tail()

Out[23]:

	Name	Roll No.	Marks
5	Pallavi	13	60
6	Ruchika	67	88
7	Saloni	45	68
8	Sahatsh	9	79
9	Tanishq	78	80

In [24]:

```
print("Number of records:", df.shape[0])
print("Number of attributes:", df.shape[1])
```

Number of records: 10
Number of attributes: 3

File Edit View Insert Cell Kernel Widgets Help








 Run
 


 Code

```
In [25]: # Minimum
minimum = df['Marks'].min()
print('Minimum:', minimum)

#Maximum
maximum = df['Marks'].max()
print('Maximum:', maximum)

#count
count = df['Marks'].shape[0]
print('Count:', count)

#mean
mean=df['Marks'].mean()
print('Mean:', mean)

#median
median=df['Marks'].median()
print('Median:', median)
```

Minimum: 60
Maximum: 89
Count: 10
Mean: 79.5
Median: 79.5