In [6]:

```
import pandas as pd
df=pd.read_csv("Desktop/StudentsPerformance1.csv")
df
```

Out[6]:

	Math_Score	Reading_Score	Writing_Score	Placement_Score	Club_join_date	Placement_
0	64.0	89	63	75.0	2019	
1	69.0	91	67	78.0	2019	
2	79.0	93	65	90.0	2021	
3	75.0	75	69	NaN	2019	
4	69.0	75	66	84.0	2018	
5	77.0	75	70	94.0	2021	
6	76.0	86	72	83.0	2020	
7	77.0	77	76	77.0	2018	
8	72.0	83	79	87.0	2021	
9	NaN	95	61	97.0	2020	
10	74.0	88	80	97.0	2020	
11	79.0	91	77	87.0	2018	
12	73.0	80	66	80.0	2018	
13	79.0	78	na	99.0	2019	
14	69.0	84	69	94.0	2020	
15	80.0	86	80	96.0	2020	
16	80.0	91	71	80.0	2019	
17	70.0	79	67	93.0	2021	
18	62.0	86	70	85.0	2019	
19	74.0	83	67	84.0	2018	
20	74.0	93	70	81.0	2018	
21	NaN	75	79	82.0	2019	
22	74.0	84	71	97.0	2019	
23	80.0	79	62	79.0	2018	
24	78.0	89	79	81.0	2018	
25	74.0	92	80	99.0	2019	
26	78.0	76	72	89.0	2021	
27	75.0	77	68	80.0	2019	
28	78.0	75	77	97.0	2019	
29	69.0	76	69	99.0	2019	

In [7]:

```
df.isnull()
```

Out[7]:

	Math_Score	Reading_Score	Writing_Score	Placement_Score	Club_join_date	Placement_
0	False	False	False	False	False	
1	False	False	False	False	False	
2	False	False	False	False	False	
3	False	False	False	True	False	
4	False	False	False	False	False	
5	False	False	False	False	False	
6	False	False	False	False	False	
7	False	False	False	False	False	
8	False	False	False	False	False	
9	True	False	False	False	False	
10	False	False	False	False	False	
11	False	False	False	False	False	
12	False	False	False	False	False	
13	False	False	False	False	False	
14	False	False	False	False	False	
15	False	False	False	False	False	
16	False	False	False	False	False	
17	False	False	False	False	False	
18	False	False	False	False	False	
19	False	False	False	False	False	
20	False	False	False	False	False	
21	True	False	False	False	False	
22	False	False	False	False	False	
23	False	False	False	False	False	
24	False	False	False	False	False	
25	False	False	False	False	False	
26	False	False	False	False	False	
27	False	False	False	False	False	
28	False	False	False	False	False	
29	False	False	False	False	False	

In [8]:

```
df.notnull()
```

Out[8]:

	Math_Score	Reading_Score	Writing_Score	Placement_Score	Club_join_date	Placement_
0	True	True	True	True	True	
1	True	True	True	True	True	
2	True	True	True	True	True	
3	True	True	True	False	True	
4	True	True	True	True	True	
5	True	True	True	True	True	
6	True	True	True	True	True	
7	True	True	True	True	True	
8	True	True	True	True	True	
9	False	True	True	True	True	
10	True	True	True	True	True	
11	True	True	True	True	True	
12	True	True	True	True	True	
13	True	True	True	True	True	
14	True	True	True	True	True	
15	True	True	True	True	True	
16	True	True	True	True	True	
17	True	True	True	True	True	
18	True	True	True	True	True	
19	True	True	True	True	True	
20	True	True	True	True	True	
21	False	True	True	True	True	
22	True	True	True	True	True	
23	True	True	True	True	True	
24	True	True	True	True	True	
25	True	True	True	True	True	
26	True	True	True	True	True	
27	True	True	True	True	True	
28	True	True	True	True	True	
29	True	True	True	True	True	

In [12]:

```
nl = pd.notnull(df['Math_Score'])
nl
```

Out[12]:

```
0      True
1      True
2      True
3      True
4      True
5      True
6      True
7      True
8      True
9     False
10     True
11     True
12     True
13     True
14     True
15     True
16     True
17     True
18     True
19     True
20     True
21    False
22     True
23     True
24     True
25     True
26     True
27     True
28     True
29     True
Name: Math_Score, dtype: bool
```

In [11]:

```
df.fillna(0)
```

Out[11]:

	Math_Score	Reading_Score	Writing_Score	Placement_Score	Club_join_date	Placement_
0	64.0	89	63	75.0	2019	
1	69.0	91	67	78.0	2019	
2	79.0	93	65	90.0	2021	
3	75.0	75	69	0.0	2019	
4	69.0	75	66	84.0	2018	
5	77.0	75	70	94.0	2021	
6	76.0	86	72	83.0	2020	
7	77.0	77	76	77.0	2018	
8	72.0	83	79	87.0	2021	
9	0.0	95	61	97.0	2020	
10	74.0	88	80	97.0	2020	
11	79.0	91	77	87.0	2018	
12	73.0	80	66	80.0	2018	
13	79.0	78	na	99.0	2019	
14	69.0	84	69	94.0	2020	
15	80.0	86	80	96.0	2020	
16	80.0	91	71	80.0	2019	
17	70.0	79	67	93.0	2021	
18	62.0	86	70	85.0	2019	
19	74.0	83	67	84.0	2018	
20	74.0	93	70	81.0	2018	
21	0.0	75	79	82.0	2019	
22	74.0	84	71	97.0	2019	
23	80.0	79	62	79.0	2018	
24	78.0	89	79	81.0	2018	
25	74.0	92	80	99.0	2019	
26	78.0	76	72	89.0	2021	
27	75.0	77	68	80.0	2019	
28	78.0	75	77	97.0	2019	
29	69.0	76	69	99.0	2019	

In [13]:

```
import pandas as pd
df=pd.read_csv("Desktop/StudentsPerformance1.csv")
pf=df['Math_Score'].mean()
df['Math_Score'].fillna(value=pf,inplace=True)
df
```

Out[13]:

	Math_Score	Reading_Score	Writing_Score	Placement_Score	Club_join_date	Placement_
0	64.000000	89	63	75.0	2019	
1	69.000000	91	67	78.0	2019	
2	79.000000	93	65	90.0	2021	
3	75.000000	75	69	NaN	2019	
4	69.000000	75	66	84.0	2018	
5	77.000000	75	70	94.0	2021	
6	76.000000	86	72	83.0	2020	
7	77.000000	77	76	77.0	2018	
8	72.000000	83	79	87.0	2021	
9	74.214286	95	61	97.0	2020	
10	74.000000	88	80	97.0	2020	
11	79.000000	91	77	87.0	2018	
12	73.000000	80	66	80.0	2018	
13	79.000000	78	na	99.0	2019	
14	69.000000	84	69	94.0	2020	
15	80.000000	86	80	96.0	2020	
16	80.000000	91	71	80.0	2019	
17	70.000000	79	67	93.0	2021	
18	62.000000	86	70	85.0	2019	
19	74.000000	83	67	84.0	2018	
20	74.000000	93	70	81.0	2018	
21	74.214286	75	79	82.0	2019	
22	74.000000	84	71	97.0	2019	
23	80.000000	79	62	79.0	2018	
24	78.000000	89	79	81.0	2018	
25	74.000000	92	80	99.0	2019	
26	78.000000	76	72	89.0	2021	
27	75.000000	77	68	80.0	2019	
28	78.000000	75	77	97.0	2019	
29	69.000000	76	69	99.0	2019	

In [18]:

```
import pandas as pd
import numpy as np
df=pd.read_csv("Desktop/StudentsPerformance1.csv")
df.replace(to_replace = np.NaN, value = -10)
df
```

Out[18]:

	Math_Score	Reading_Score	Writing_Score	Placement_Score	Club_join_date	Placement_
0	64.0	89	63	75.0	2019	
1	69.0	91	67	78.0	2019	
2	79.0	93	65	90.0	2021	
3	75.0	75	69	NaN	2019	
4	69.0	75	66	84.0	2018	
5	77.0	75	70	94.0	2021	
6	76.0	86	72	83.0	2020	
7	77.0	77	76	77.0	2018	
8	72.0	83	79	87.0	2021	
9	NaN	95	61	97.0	2020	
10	74.0	88	80	97.0	2020	
11	79.0	91	77	87.0	2018	
12	73.0	80	66	80.0	2018	
13	79.0	78	na	99.0	2019	
14	69.0	84	69	94.0	2020	
15	80.0	86	80	96.0	2020	
16	80.0	91	71	80.0	2019	
17	70.0	79	67	93.0	2021	
18	62.0	86	70	85.0	2019	
19	74.0	83	67	84.0	2018	
20	74.0	93	70	81.0	2018	
21	NaN	75	79	82.0	2019	
22	74.0	84	71	97.0	2019	
23	80.0	79	62	79.0	2018	
24	78.0	89	79	81.0	2018	
25	74.0	92	80	99.0	2019	
26	78.0	76	72	89.0	2021	
27	75.0	77	68	80.0	2019	
28	78.0	75	77	97.0	2019	
29	69.0	76	69	99.0	2019	

In [20]:

```
df.fillna(0)
```

Out[20]:

	Math_Score	Reading_Score	Writing_Score	Placement_Score	Club_join_date	Placement_
0	64.0	89	63	75.0	2019	
1	69.0	91	67	78.0	2019	
2	79.0	93	65	90.0	2021	
3	75.0	75	69	0.0	2019	
4	69.0	75	66	84.0	2018	
5	77.0	75	70	94.0	2021	
6	76.0	86	72	83.0	2020	
7	77.0	77	76	77.0	2018	
8	72.0	83	79	87.0	2021	
9	0.0	95	61	97.0	2020	
10	74.0	88	80	97.0	2020	
11	79.0	91	77	87.0	2018	
12	73.0	80	66	80.0	2018	
13	79.0	78	na	99.0	2019	
14	69.0	84	69	94.0	2020	
15	80.0	86	80	96.0	2020	
16	80.0	91	71	80.0	2019	
17	70.0	79	67	93.0	2021	
18	62.0	86	70	85.0	2019	
19	74.0	83	67	84.0	2018	
20	74.0	93	70	81.0	2018	
21	0.0	75	79	82.0	2019	
22	74.0	84	71	97.0	2019	
23	80.0	79	62	79.0	2018	
24	78.0	89	79	81.0	2018	
25	74.0	92	80	99.0	2019	
26	78.0	76	72	89.0	2021	
27	75.0	77	68	80.0	2019	
28	78.0	75	77	97.0	2019	
29	69.0	76	69	99.0	2019	

In [21]:

```
df.dropna()
```

Out[21]:

	Math_Score	Reading_Score	Writing_Score	Placement_Score	Club_join_date	Placement_
0	64.0	89	63	75.0	2019	
1	69.0	91	67	78.0	2019	
2	79.0	93	65	90.0	2021	
4	69.0	75	66	84.0	2018	
5	77.0	75	70	94.0	2021	
6	76.0	86	72	83.0	2020	
7	77.0	77	76	77.0	2018	
8	72.0	83	79	87.0	2021	
10	74.0	88	80	97.0	2020	
11	79.0	91	77	87.0	2018	
12	73.0	80	66	80.0	2018	
13	79.0	78	na	99.0	2019	
14	69.0	84	69	94.0	2020	
15	80.0	86	80	96.0	2020	
16	80.0	91	71	80.0	2019	
17	70.0	79	67	93.0	2021	
18	62.0	86	70	85.0	2019	
19	74.0	83	67	84.0	2018	
20	74.0	93	70	81.0	2018	
22	74.0	84	71	97.0	2019	
23	80.0	79	62	79.0	2018	
24	78.0	89	79	81.0	2018	
25	74.0	92	80	99.0	2019	
26	78.0	76	72	89.0	2021	
27	75.0	77	68	80.0	2019	
28	78.0	75	77	97.0	2019	
29	69.0	76	69	99.0	2019	

In [22]:

```
df.dropna(axis=1)
```

Out[22]:

	Reading_Score	Writing_Score	Club_join_date	Placement_Offer_Count
0	89	63	2019	2
1	91	67	2019	2
2	93	65	2021	3
3	75	69	2019	3
4	75	66	2018	2
5	75	70	2021	3
6	86	72	2020	2
7	77	76	2018	2
8	83	79	2021	3
9	95	61	2020	3
10	88	80	2020	3
11	91	77	2018	3
12	80	66	2018	2
13	78	na	2019	3
14	84	69	2020	3
15	86	80	2020	3
16	91	71	2019	2
17	79	67	2021	3
18	86	70	2019	3
19	83	67	2018	2
20	93	70	2018	2
21	75	79	2019	2
22	84	71	2019	3
23	79	62	2018	2
24	89	79	2018	2
25	92	80	2019	3
26	76	72	2021	3
27	77	68	2019	2
28	75	77	2019	3
29	76	69	2019	3

In [33]:

```
import pandas as pd
import numpy as np
df=pd.read_csv("Desktop/StudentsPerformance1.csv")
df
```

Out[33]:

	Math_Score	Reading_Score	Writing_Score	Placement_Score	Club_join_date	Placement_
0	63.0	79	63	75.0	2021	
1	63.0	82	65	89.0	2021	
2	73.0	79	62	77.0	2019	
3	69.0	92	78	NaN	2020	
4	63.0	95	76	78.0	2020	
5	68.0	75	62	93.0	2018	
6	71.0	89	68	100.0	2021	
7	74.0	79	73	100.0	2021	
8	64.0	88	72	98.0	2019	
9	NaN	95	72	76.0	2020	
10	78.0	91	60	89.0	2019	
11	75.0	82	65	98.0	2019	
12	78.0	85	64	95.0	2020	
13	73.0	78	na	83.0	2019	
14	69.0	75	69	89.0	2018	
15	66.0	92	63	83.0	2018	
16	65.0	76	70	89.0	2021	
17	80.0	95	72	98.0	2020	
18	75.0	92	68	81.0	2018	
19	73.0	76	62	75.0	2018	
20	79.0	79	67	90.0	2021	
21	NaN	77	76	83.0	2021	
22	75.0	81	60	79.0	2019	
23	75.0	82	75	100.0	2019	
24	71.0	89	73	87.0	2018	
25	61.0	90	66	83.0	2020	
26	61.0	84	71	94.0	2020	
27	60.0	80	63	85.0	2021	
28	68.0	86	77	85.0	2018	
29	73.0	90	72	80.0	2018	

In [2]:

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
df=pd.read_csv("Desktop/StudentsPerformance1.csv")
df
```

Out[2]:

	Math_Score	Reading_Score	Writing_Score	Placement_Score	Club_join_date	Placement_
0	75.0	95	74	86.0	2020	
1	76.0	82	75	81.0	2018	
2	60.0	86	61	92.0	2019	
3	100.0	83	63	NaN	2020	
4	74.0	87	74	75.0	2019	
5	73.0	150	80	93.0	2018	
6	60.0	83	76	92.0	2021	
7	74.0	78	130	75.0	2019	
8	76.0	78	67	76.0	2018	
9	NaN	83	73	85.0	2021	
10	75.0	89	70	90.0	2020	
11	73.0	75	80	87.0	2020	
12	71.0	81	73	95.0	2019	
13	60.0	94	na	77.0	2020	
14	62.0	81	80	89.0	2019	
15	74.0	81	64	99.0	2020	
16	160.0	89	78	89.0	2018	
17	60.0	20	67	89.0	2020	
18	60.0	80	66	50.0	2021	
19	65.0	85	75	77.0	2018	
20	76.0	91	60	86.0	2019	
21	NaN	86	72	84.0	2018	
22	67.0	83	73	80.0	2019	
23	80.0	85	74	92.0	2020	
24	60.0	89	74	20.0	2018	
25	69.0	78	68	82.0	2021	
26	30.0	83	74	89.0	2019	
27	75.0	76	40	79.0	2018	
28	68.0	87	77	87.0	2021	
29	10.0	82	63	78.0	2020	

In [4]:

```
print("hello")
```

```
hello
```

In [ ]:

```
```