

In [1]:

```
import pandas as pd
import numpy as np
```

In [2]:

```
df= pd.read_csv('student data.csv')
df
```

Out[2]:

	Roll	Name	Class	Marks	Age
0	101	Aarav Sharma	SE	78	19
1	102	Isha Verma	TE	85	20
2	103	Rohan Iyer	BE	67	21
3	104	Nidhi Patil	SE	90	19
4	105	Karan Mehta	TE	74	20
5	106	Pooja Deshmukh	BE	81	22
6	107	Aditya Joshi	SE	76	18
7	108	Sneha Kulkarni	TE	89	21
8	109	Vikram Nair	BE	72	22
9	110	Ananya Choudhary	SE	95	19
10	111	Rajat Bansal	TE	68	20
11	112	Priya Sinha	BE	79	22
12	113	Akash Kapoor	SE	83	19
13	114	Simran Malhotra	TE	91	21
14	115	Manish Reddy	BE	70	23
15	116	Tanya Ghosh	SE	87	18
16	117	Suresh Menon	TE	75	20
17	118	Kavita Pillai	BE	80	22
18	119	Devendra Chauhan	SE	65	19
19	120	Meenal Saxena	TE	92	21
20	121	Harsh Gupta	BE	78	22
21	122	Swati Srivastava	SE	85	18
22	123	Arjun Thakur	TE	88	21
23	124	Bhavana Shetty	BE	90	22
24	125	Rohit Yadav	SE	77	19
25	126	Deepika Banerjee	TE	82	20
26	127	Mohit Rao	BE	66	22
27	128	Sakshi Mishra	SE	84	19
28	129	Tarun Singh	TE	79	21

	Roll	Name	Class	Marks	Age
29	130	Nikhil Das	BE	88	23
30	131	Riya Paul	SE	92	18
31	132	Gautam Bhat	TE	73	20
32	133	Neha Khanna	BE	69	22
33	134	Varun Agrawal	SE	80	19
34	135	Aditi Nanda	TE	94	21
35	136	Yashwant Pillai	BE	75	23
36	137	Supriya Borkar	SE	89	18
37	138	Ramesh Prabhu	TE	76	20
38	139	Pallavi Mukherjee	BE	91	22
39	140	Vishal Khatri	SE	72	19
40	141	Shruti Rao	TE	83	21
41	142	Kunal Bhardwaj	BE	77	23
42	143	Meera Nair	SE	86	18
43	144	Sumit Saxena	TE	79	20
44	145	Aniket Joshi	BE	93	22
45	146	Priyanshi Tiwari	SE	70	19
46	147	Dhruv Malhotra	TE	82	21
47	148	Karishma Shah	BE	74	22
48	149	Rahul Sethi	SE	90	19
49	150	Anushka Sharma	TE	88	20

In [3]:

```
df['Marks'].mean()
```

Out[3]:

80.94

In [4]:

```
df['Age'].median()
```

Out[4]:

20.0

In [5]:

```
df['Marks'].std()
```

Out[5]:

8.2348438395166

In [6]:

```
df.min()
```

Out[6]:

```
Roll      101
Name      Aarav Sharma
Class      BE
Marks      65
Age        18
dtype: object
```

```
In [7]:
```

```
df.max()
```

```
Out[7]:
```

```
Roll      150
Name      Yashwant Pillai
Class      TE
Marks      95
Age        23
dtype: object
```

```
In [8]:
```

```
np.std(df['Marks'])
```

```
Out[8]:
```

```
8.152079489308234
```

```
In [9]:
```

```
gr1 = df.groupby('Class')
```

```
In [10]:
```

```
te = gr1.get_group('TE')
```

```
In [11]:
```

```
te
```

```
Out[11]:
```

	Roll	Name	Class	Marks	Age
1	102	Isha Verma	TE	85	20
4	105	Karan Mehta	TE	74	20
7	108	Sneha Kulkarni	TE	89	21
10	111	Rajat Bansal	TE	68	20
13	114	Simran Malhotra	TE	91	21
16	117	Suresh Menon	TE	75	20
19	120	Meenal Saxena	TE	92	21
22	123	Arjun Thakur	TE	88	21
25	126	Deepika Banerjee	TE	82	20
28	129	Tarun Singh	TE	79	21
31	132	Gautam Bhat	TE	73	20
34	135	Aditi Nanda	TE	94	21
37	138	Ramesh Prabhu	TE	76	20
40	141	Shruti Rao	TE	83	21
43	144	Sumit Saxena	TE	79	20

	Roll	Name	Class	Marks	Age
46	147	Dhruv Malhotra	TE	82	21
49	150	Anushka Sharma	TE	88	20

In [12]:

```
te.min()
```

Out[12]:

```
Roll      102
Name      Aditi Nanda
Class      TE
Marks      68
Age        20
dtype: object
```

In [13]:

```
te.max()
```

Out[13]:

```
Roll      150
Name      Tarun Singh
Class      TE
Marks      94
Age        21
dtype: object
```

In [14]:

```
gr2 = df.groupby('Age')
```

In [15]:

```
gr2.groups
```

Out[15]:

```
{18: [6, 15, 21, 30, 36, 42], 19: [0, 3, 9, 12, 18, 24, 27, 33, 39, 45, 48], 20: [1, 4, 10, 16, 25, 31, 37, 43, 49], 21: [2, 7, 13, 19, 22, 28, 34, 40, 46], 22: [5, 8, 11, 17, 20, 23, 26, 32, 38, 44, 47], 23: [14, 29, 35, 41]}
```

In [16]:

```
tw = gr2.get_group(20)
```

In [17]:

```
tw
```

Out[17]:

	Roll	Name	Class	Marks	Age
1	102	Isha Verma	TE	85	20
4	105	Karan Mehta	TE	74	20
10	111	Rajat Bansal	TE	68	20
16	117	Suresh Menon	TE	75	20
25	126	Deepika Banerjee	TE	82	20
31	132	Gautam Bhat	TE	73	20
37	138	Ramesh Prabhu	TE	76	20

	Roll	Name	Class	Marks	Age
43	144	Sumit Saxena	TE	79	20
49	150	Anushka Sharma	TE	88	20

In [ ]: