In [14]:
```
import pandas as pd
```

In [15]:
```
df = pd.read_csv("student.csv")
```

In [18]:
```
df.describe
```

Out[18]:
```
<bound method NDFrame.describe of     id         name  class  mark  gender
0    1     John Deo   Four    75  female
1    2     Max Ruin  Three    85    male
2    3       Arnold  Three    55    male
3    4   Krish Star   Four    60  female
4    5    John Mike   Four    60  female
5    6    Alex John   Four    55    male
6    7  My John Rob  Fifth    78    male
7    8       Asruid   Five    85    male
8    9      Tes Qry    Six    78    male
9   10     Big John   Four    55  female
10  11       Ronald    Six    89  female
11  12        Recky    Six    94  female
12  13          Kty  Seven    88  female
13  14         Bigy  Seven    88  female
14  15     Tade Row   Four    88    male
15  16        Gimmy   Four    88    male
16  17        Tumyu    Six    54    male
17  18        Honny   Five    75    male
18  19        Tinny   Nine    18    male
19  20       Jackly   Nine    65  female
20  21   Babby John   Four    69  female
21  22       Reggid  Seven    55  female
22  23        Herod  Eight    79    male
23  24    Tiddy Now  Seven    78    male
24  25     Giff Tow  Seven    88    male
25  26       Crelea  Seven    79    male
26  27     Big Nose  Three    81  female
27  28    Rojj Base  Seven    86  female
28  29  Tess Played  Seven    55    male
29  30    Reppy Red    Six    79  female
30  31  Marry Toeey   Four    88    male
31  32    Binn Rott  Seven    90  female
32  33    Kenn Rein    Six    96  female
33  34     Gain Toe  Seven    69    male
34  35   Rows Noump    Six    88  female>
```

In [13]:
```
df['mark'].mean()
```

Out[13]:
```
74.65714285714286
```

In [15]:
```
df['mark'].max()
```

Out[15]:
```
96
```

In [17]:
```
df['mark'].min()
```

Out[17]:
```
18
```

In [19]:
```
df['mark'].median()
```

Out[19]:
```
79.0
```

In [21]:
```
df['mark'].std()
```

Out[21]:
```
16.401116994139826
```

In [23]:
```
import numpy as np
```

In [25]:
```
np.std(df['mark'])
```

Out[25]:
```
16.16511739543401
```

In [43]:
```
gr1 = df.groupby('class')
gr1.first()
```

Out[43]:

class	id	name	mark	gender
Eight	23	Herod	79	male
Fifth	7	My John Rob	78	male
Five	8	Asruid	85	male
Four	1	John Deo	75	female
Nine	19	Tinny	18	male
Seven	13	Kty	88	female
Six	9	Tes Qry	78	male
Three	2	Max Ruin	85	male

In [41]:
```
eight = gr1.get_group('Eight')
eight.min()
```

Out[41]:
```
id           23
name      Herod
class     Eight
mark         79
gender     male
dtype: object
```

In [45]:
```
eight.max()
```

Out[45]:
```
id           23
name      Herod
class     Eight
mark         79
gender      male
dtype: object
```

In [49]:
```
df1=pd.read_csv('Iris.csv')
```

In [50]:
```
df1
```

Out[50]:

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
0	1	5.1	3.5	1.4	0.2	Iris-setosa
1	2	4.9	3.0	1.4	0.2	Iris-setosa
2	3	4.7	3.2	1.3	0.2	Iris-setosa
3	4	4.6	3.1	1.5	0.2	Iris-setosa
4	5	5.0	3.6	1.4	0.2	Iris-setosa
...	...	...	...	...	...	...
145	146	6.7	3.0	5.2	2.3	Iris-virginica
146	147	6.3	2.5	5.0	1.9	Iris-virginica
147	148	6.5	3.0	5.2	2.0	Iris-virginica
148	149	6.2	3.4	5.4	2.3	Iris-virginica
149	150	5.9	3.0	5.1	1.8	Iris-virginica

150 rows × 6 columns

In [52]:
```
df1.describe()
```

Out[52]:

	id	mark
count	35.000000	35.000000
mean	18.000000	74.657143
std	10.246951	16.401117
min	1.000000	18.000000
25%	9.500000	62.500000
50%	18.000000	79.000000
75%	26.500000	88.000000
max	35.000000	96.000000

In [56]:
```
gr1 = df1.groupby('Species')
gr1.first()
```

Out[56]:

Species	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm
Iris-setosa	1	5.1	3.5	1.4	0.2
Iris-versicolor	51	7.0	3.2	4.7	1.4
Iris-virginica	101	6.3	3.3	6.0	2.5

In [63]:
```
Irissetosa = gr1.get_group('Iris-setosa')
Irissetosa.describe()
```

Out[63]:

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm
count	50.00000	50.00000	50.000000	50.000000	50.00000
mean	25.50000	5.00600	3.418000	1.464000	0.24400
std	14.57738	0.35249	0.381024	0.173511	0.10721
min	1.00000	4.30000	2.300000	1.000000	0.10000
25%	13.25000	4.80000	3.125000	1.400000	0.20000
50%	25.50000	5.00000	3.400000	1.500000	0.20000
75%	37.75000	5.20000	3.675000	1.575000	0.30000
max	50.00000	5.80000	4.400000	1.900000	0.60000

In [65]:
```
Irisversicolor = gr1.get_group('Iris-versicolor')
Irisversicolor.describe()
```

Out[65]:

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm
count	50.00000	50.000000	50.000000	50.000000	50.000000
mean	75.50000	5.936000	2.770000	4.260000	1.326000
std	14.57738	0.516171	0.313798	0.469911	0.197753
min	51.00000	4.900000	2.000000	3.000000	1.000000
25%	63.25000	5.600000	2.525000	4.000000	1.200000
50%	75.50000	5.900000	2.800000	4.350000	1.300000
75%	87.75000	6.300000	3.000000	4.600000	1.500000
max	100.00000	7.000000	3.400000	5.100000	1.800000

In [66]:
```
Irisvirginica = gr1.get_group('Iris-virginica')
Irisvirginica.describe()
```

Out[66]:

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm
count	50.00000	50.00000	50.000000	50.000000	50.00000
mean	125.50000	6.58800	2.974000	5.552000	2.02600
std	14.57738	0.63588	0.322497	0.551895	0.27465
min	101.00000	4.90000	2.200000	4.500000	1.40000
25%	113.25000	6.22500	2.800000	5.100000	1.80000
50%	125.50000	6.50000	3.000000	5.550000	2.00000
75%	137.75000	6.90000	3.175000	5.875000	2.30000
max	150.00000	7.90000	3.800000	6.900000	2.50000