

In [5]:

```
import statistics
```

In [21]:

```
p = [2,3,4,4,5,6,7,9]
```

In [7]:

```
statistics.mean(p)
```

Out[7]:

5

In [8]:

```
import numpy as np
```

In [9]:

```
q = [2,4,4,4,5,5,7,9]
```

In [10]:

```
np.mean(q)
```

Out[10]:

5.0

In [12]:

```
np.std(q)
```

Out[12]:

2.0

In [13]:

```
np.median(q)
```

Out[13]:

4.5

In [14]:

```
np.max(q)
```

Out[14]:

9

In [15]:

```
np.min(q)
```

Out[15]:

2

In [17]:

```
np.percentile(q,25)
```

Out[17]:

4.0

In [18]:

```
np.percentile(q, 50)
```

Out[18]:

4.5

In [19]:

```
np.percentile(q, 75)
```

Out[19]:

5.5

In [20]:

```
np.var(q)
```

Out[20]:

4.0

In [22]:

```
np.var(p)
```

Out[22]:

4.5

In [25]:

```
P = [2, 4, 4, 4, 5, 5, 7, 9]
Q = [10, 13, 15, 14, 13, 16, 18, 21]
```

In [26]:

```
np.cov(P, Q)
```

Out[26]:

```
array([[ 4.57142857,  6.85714286],
       [ 6.85714286, 11.42857143]])
```

In [28]:

```
np.cov(P, Q) [1, 0]
```

Out[28]:

6.857142857142857

In [29]:

```
np.cov(P, Q) [1, 1]
```

Out[29]:

11.428571428571427

In [30]:

```
np.cov(P, Q) [0, 0]
```

Out[30]:

4.571428571428571

In [31]:

```
np.corrcoef(P, Q)
```

```
Out[31]:
```

```
array([[1.          , 0.9486833],  
       [0.9486833, 1.          ]])
```

```
In [ ]:
```