

```
[ 3986.5 4958. 5259.5 636.5 1440.5 2244.5]]
```

```
[112]: covariance=cov(d,e)
print(covariance)
```

```
[[ 180.5  408.5  636.5  380.   465.5  551.   399. ]
 [ 408.5  924.5 1440.5  860.  1053.5 1247.   903. ]
 [ 636.5 1440.5 2244.5 1340.  1641.5 1943.  1407. ]
 [ 380.   860.   1340.   800.   980.  1160.   840. ]
 [ 465.5 1053.5 1641.5  980.  1200.5 1421.  1029. ]
 [ 551.  1247.  1943.  1160.  1421.  1682.  1218. ]
 [ 399.   903.  1407.   840.  1029.  1218.   882. ]]
```

```
[113]: pip install scipy
```

Requirement already satisfied: scipy in c:\users\divya\AppData\Local\Programs\Python\Python38-64\lib\site-packages (1.2.1)
Requirement already satisfied: numpy<1.28.0,>=1.21.6 in c:\users\divya\AppData\Local\Programs\Python\Python38-64\lib\site-packages (1.21.6)
Note: you may need to restart the kernel to use updated packages.

```
[118]: from scipy.stats import pearsonr
a=[1,2,3,4,5,6,7,8,9,10]
b=[11,13,15,16,24,56,34,25,39,90]
corr=pearsonr(a,b)
print(corr)
```

PearsonRResult(statistic=0.7671433035186972, pvalue=0.009605641558)

```
[119]: from scipy.stats import spearmanr
a=[1,2,3,4,5,6,7,8,9,10]
b=[11,13,15,16,24,56,34,25,39,90]
corr=spearmanr(a,b)
print(corr)
```

SignificanceResult(statistic=0.9151515151515152, pvalue=0.00020447)

```
[ ]:
```