

In [199]:

```
1 import numpy as np
```

In [200]:

```
1 x=np.array([[1,1],[1,2],[2,2],[2,3],[2,4],[3,4],[3,5]])
2 y=np.array([4,6,7,8,9,10,12])
```

In [201]:

```
1 x1=np.mean(x)
```

In [202]:

```
1 y1=np.mean(y)
```

In [203]:

```
1 from sklearn.linear_model import LinearRegression
2 sc=LinearRegression()
3 sc.fit(x,y)
```

Out[203]:

LinearRegression()

In [204]:

```
1 y_pred= sc.predict(x)
```

In [207]:

```
1 sse=np.sum((y-y_pred)**2)
2 sse
```

Out[207]:

0.6666666666666661

In [208]:

```
1 ssr=np.sum((y_pred-np.mean(y))**2)
```

In [209]:

```
1 ssr
```

Out[209]:

41.333333333333336

In [210]:

```
1 sst=sse+ssr  
2 sst
```

Out[210]:

42.0

In [ ]:

```
1
```