

In [1]:

```
import pandas as pd
import numpy as np
from sklearn import linear_model
```

In [2]:

```
df = pd.read_csv('C:/Users/DELL/Desktop/AI ML _ SCM/Assignment 2/Assignment2_Dataset.csv')
```

In [3]:

```
df.head()
```

Out[3]:

	S.No	District	Cases	Rate	Data1	Data2
0	1	Ariyalur	16	1.6	196727	6169
1	2	Chennai	183	0.8	2542245	89809
2	3	Coimbatore	205	1.8	1170289	19173
3	4	Cuddalore	57	1.3	612752	6333
4	5	Dharmapuri	21	1.1	446398	4172

In [5]:

```
reg = linear_model.LinearRegression()
reg.fit(df.drop(['S.No', 'District', 'Cases'], axis='columns'), df.Cases)
```

Out[5]:

```
LinearRegression()
```

In [7]:

```
reg.coef_
```

Out[7]:

```
array([ 2.56675514e+01,  1.63965989e-04, -2.27187871e-03])
```

In [10]:

```
reg.intercept_
```

Out[10]:

```
-41.91561018648506
```

In [11]:

```
reg.predict([[1.6, 196727, 6169]])
```

Out[11]:

```
array([17.3937894])
```

In []: