

# Implementing ML model.

```
In [15]: import pandas as pd
import numpy as np
from sklearn.linear_model import LinearRegression
from sklearn.model_selection import train_test_split
```

```
In [16]: data_frame=pd.read_csv('final_data.csv')
data_frame.head()
```

```
Out[16]:
```

	FIPS	45.5_objective	Adj.Death_rate	low_death_rate	upper_death_rate	avg_deaths	rec
0	0	1.0	0.615723	0.695157	0.470742	1.000000	
1	21193	1.0	1.000000	1.000000	0.889692	0.244998	
2	21197	1.0	0.999085	0.970622	0.916463	0.164869	
3	2185	1.0	0.997862	0.858874	1.000000	0.047004	
4	21189	1.0	0.977739	0.904597	0.940306	0.090251	

```
In [17]: y=data_frame['Adj.Death_rate']
x=data_frame.drop(['Adj.Death_rate'],axis=1)
```

```
In [18]: x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.3,ra
```

```
In [19]: model=LinearRegression()
model.fit(x_train,y_train)
```

```
Out[19]: LinearRegression()
```

```
In [20]: model.score(x_test,y_test)
```

```
Out[20]: 0.9997907548516883
```