```python
import pandas as pd
import numpy as np
```

```python
df=pd.read_csv("tryout.csv")

df.head()
```

	CRIM	ZN	INDUS	CHAS	NOX	RM	AGE	DIS	RAD	TAX	PTRATIO	
0	0.00632	18.0	2.31	0	0.538	6.575	65.2	4.0900	1	296	15.3	396.9
1	0.02731	0.0	7.07	0	0.469	6.421	78.9	4.9671	2	242	17.8	396.9
2	0.02729	0.0	7.07	0	0.469	7.185	61.1	4.9671	2	242	17.8	392.8
3	0.03237	0.0	2.18	0	0.458	6.998	45.8	6.0622	3	222	18.7	394.6
4	0.06905	0.0	2.18	0	0.458	7.147	54.2	6.0622	3	222	18.7	396.9

```python
# df['index']=df['Price']//df['Square Footage']
x=df[['CRIM','ZN','INDUS','CHAS','NOX','AGE','DIS','RAD','PTRATIO','B','LSTAT','
y=df['TAX']
```

```python
from sklearn.model_selection import train_test_split
x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.20,random_state=2
```

```python
from sklearn import linear_model
lr=linear_model.LinearRegression()
lr.fit(x_train,y_train)
```

LinearRegression ⓘ ❓

LinearRegression()

```python
y_train_hat=lr.predict(x_train)
from sklearn import metrics
print('MAE: ',metrics.mean_absolute_error(y_train,y_train_hat))
print('RMSE:',np.sqrt(metrics.mean_squared_error(y_train,y_train_hat)))
print('R-squard:',metrics.r2_score(y_train,y_train_hat))
```

```
MAE:  35.067747302831926
RMSE: 56.15168606678745
R-squard: 0.8886603587245137
```

```python
y_test_hat=lr.predict(x_test)
print('MAE: ',metrics.mean_absolute_error(y_test,y_test_hat))
print('RMSE:',np.sqrt(metrics.mean_squared_error(y_test,y_test_hat)))
print('R-squard:',metrics.r2_score(y_test,y_test_hat))
```

```
MAE:  31.824674107777938
RMSE: 53.22346491965001
R-squard: 0.8966666447535955
```