

Pract4

```
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LinearRegression
from sklearn.metrics import mean_squared_error
```

```
df = pd.read_csv("BostonHousing.csv")
df
```

```
df.columns
```

```
x = df[['crim', 'zn', 'indus', 'chas', 'nox', 'rm', 'age', 'dis', 'rad', 'tax',
'ptratio', 'b', 'lstat']]
```

```
x
```

```
y = df["medv"]
y
```

*#75% - training data set*

*#25% - testing data set*

```
x_train, x_test, y_train, y_test = train_test_split(x,y,test_size=0.25,
random_state=42)
```

```
model = LinearRegression()
```

```
model.fit(x_train,y_train)
```

*#not able to see output bcoz it os class*

```
y_pred = model.predict(x_test)
```

```
y_pred
```

*#testing values for y*

```
model.score(x_train,y_train)
```

```
model.score(x_test,y_test)
```

```
mean_squared_error(y_test,y_pred) //error ka diff leke mean
```

```
import numpy as np
```

```
np.sqrt(mean_squared_error(y_test,y_pred))
```

```
result = pd.DataFrame({'Actual':y_test, 'Producted':y_pred})
```

```
result
```