**House Price Prediction using Linear Regression**

*#Implementation of Linear Regression*  
import sys

import subprocess

subprocess.check\_call([sys.executable,'-m','pip','install','sklearn'])

import pandas as pd

import numpy as np

from sklearn import linear\_model

from sklearn.model\_selection import train\_test\_split

from sklearn.datasets import load\_boston

boston = load\_boston()

#print(boston)

df\_x = pd.DataFrame(boston.data,columns = boston.feature\_names)

df\_y = pd.DataFrame(boston.target)

df\_x.describe()

reg = linear\_model.LinearRegression()

x\_train,x\_test, y\_train, y\_test = train\_test\_split(df\_x , df\_y,test\_size=0.33, random\_state =42)

reg.fit(x\_train,y\_train)

print(reg.coef\_)

y\_pred = reg.predict(x\_test)

print(y\_pred)

y\_pred[2]

y\_test[0]

print(np.mean((y\_pred-y\_test)\*\*2))

from sklearn.metrics import mean\_squared\_error

print(mean\_squared\_error(y\_test,y\_pred))

**OUTPUT:**

[[-1.28749718e-01 3.78232228e-02 5.82109233e-02 3.23866812e+00

-1.61698120e+01 3.90205116e+00 -1.28507825e-02 -1.42222430e+00

2.34853915e-01 -8.21331947e-03 -9.28722459e-01 1.17695921e-02

-5.47566338e-01]]

[[28.53469469]

[36.6187006 ]

[15.63751079]

[25.5014496 ]

[18.7096734 ]

[23.16471591]

[17.31011035]

[14.07736367]