

House_price_prediction

test_size=1/3, random_state=0:

```
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np

Housedata=pd.read_csv(r'C:\Users\DELL\Downloads\5th\5th\SLR - Practicle\House_data.csv')
Housedata

space=Housedata['sqft_living']
price=Housedata['price']

x = np.array(space).reshape(-1, 1)
y = np.array(price)

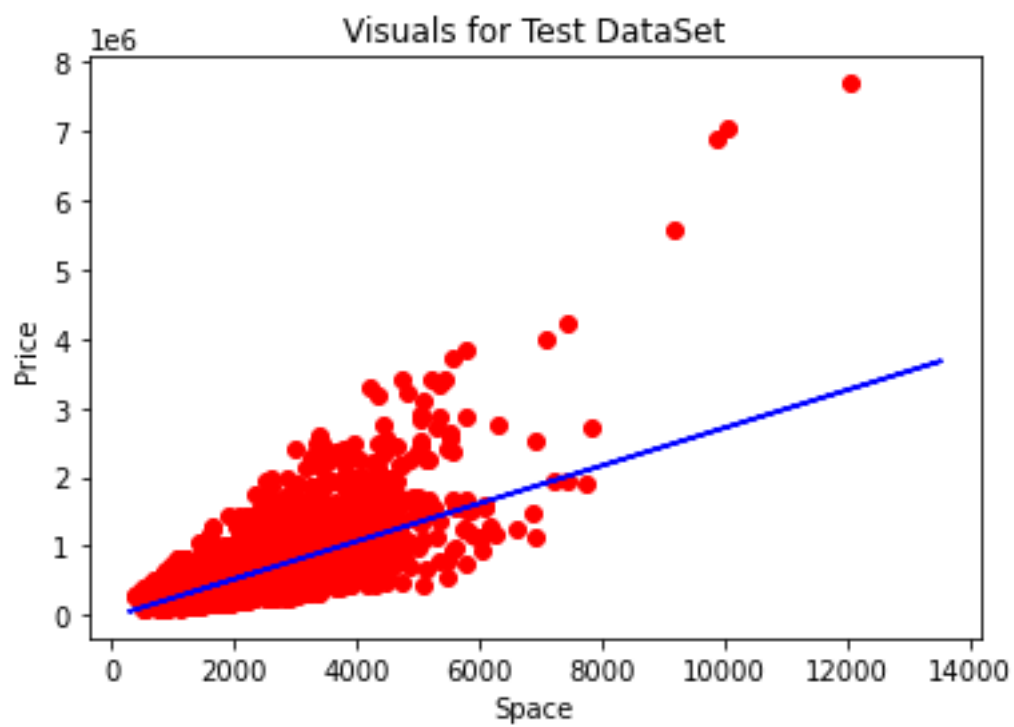
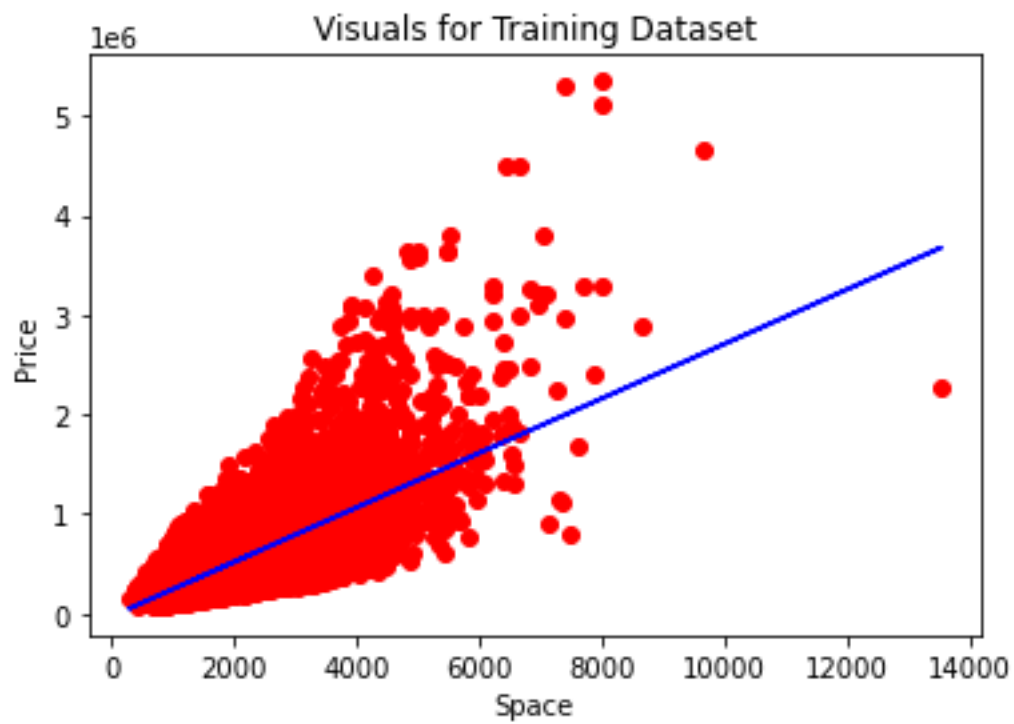
from sklearn.model_selection import train_test_split
xtrain, xtest, ytrain, ytest = train_test_split(x,y,test_size=1/3, random_state=0)

from sklearn.linear_model import LinearRegression
regressor = LinearRegression()
regressor.fit(xtrain, ytrain)

pred = regressor.predict(xtest)

plt.scatter(xtrain, ytrain, color= 'red')
plt.plot(xtrain, regressor.predict(xtrain), color = 'blue')
plt.title ("Visuals for Training Dataset")
plt.xlabel("Space")
plt.ylabel("Price")
plt.show()

plt.scatter(xtest, ytest, color= 'red')
plt.plot(xtrain, regressor.predict(xtrain), color = 'blue')
plt.title("Visuals for Test DataSet")
plt.xlabel("Space")
plt.ylabel("Price")
plt.show()
```



Prediction_Table:

pred - NumPy object array

	0
0	362497
1	1.24961e+06
2	365235
3	280356
4	841650
5	422733
6	441899
7	665869
8	644513

X_Test:

xtest - NumPy object array

	0
0	1430
1	4670
2	1440
3	1130
4	3180
5	1650
6	1720
7	2538
8	2460

X_Train:

xtrain - NumPy object array

	0
0	1260
1	1320
2	920
3	1350
4	1820
5	2770
6	5550
7	2690
8	2440

Y_Test:

ytest - NumPy object array

	0
0	297000
1	1.578e+06
2	562100
3	631500
4	780000
5	485000
6	340000
7	335606
8	425000

Y_Train:

ytrain - NumPy object array	
	0
0	465750
1	575000
2	212500
3	455000
4	480000
5	825000
6	1.65e+06
7	699850
8	274700

X_Independent_variable:

Index	sqft_living
0	1180
1	2570
2	770
3	1960
4	1680
5	5420
6	1715
7	1060
8	1780

Y_Dependent_variable:

Index	price
0	221900
1	538000
2	180000
3	604000
4	510000
5	1.225e+06
6	257500
7	291850
8	229500