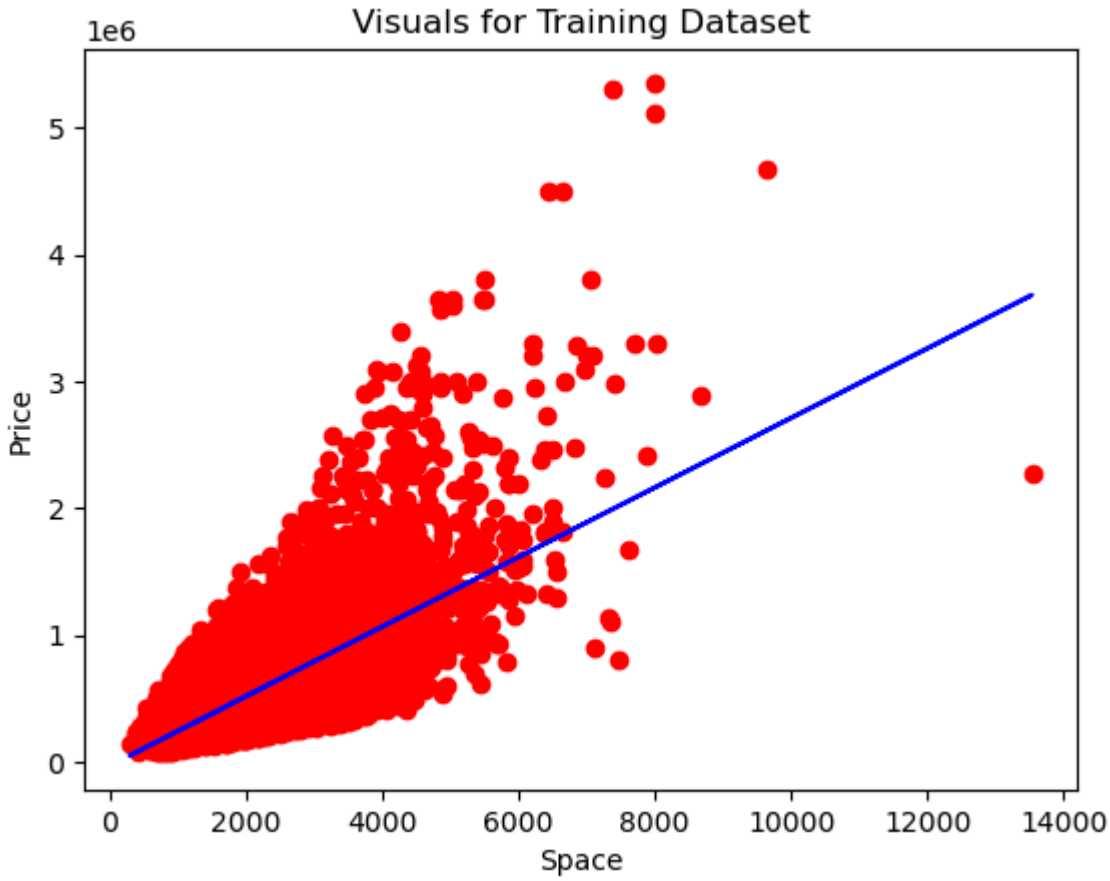
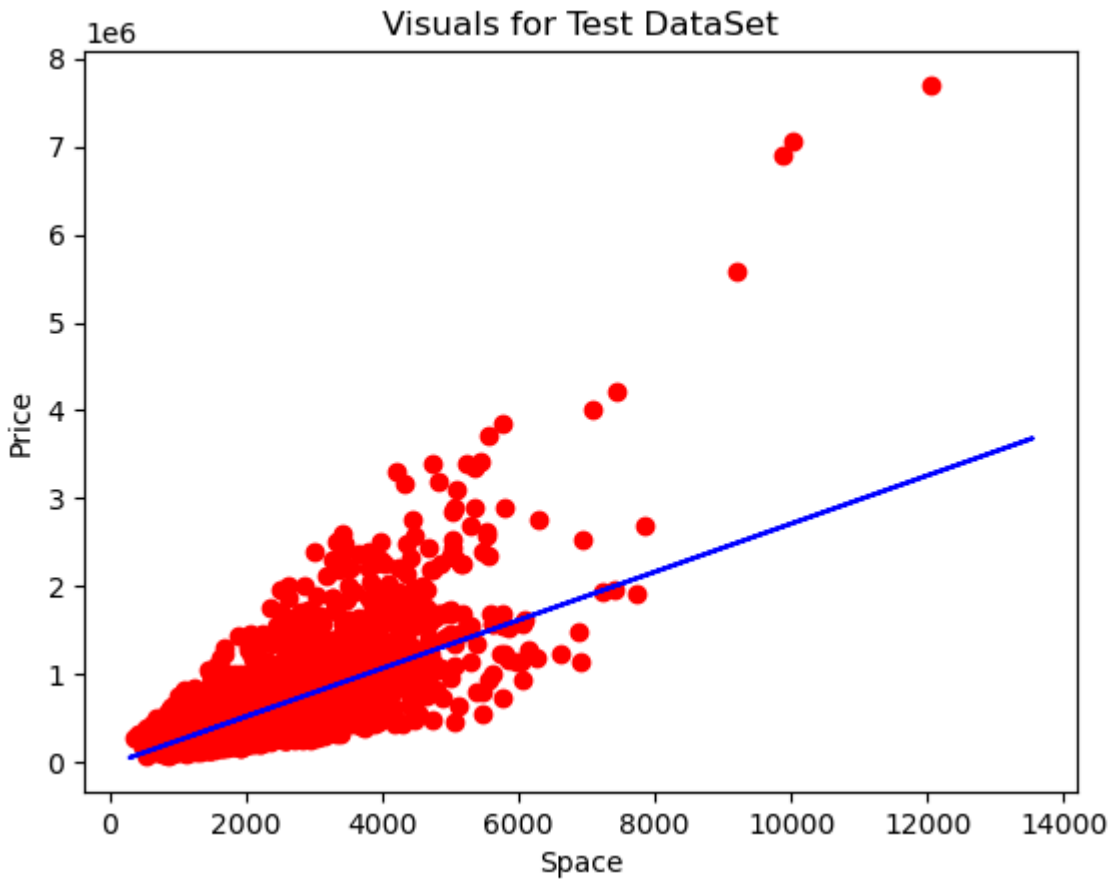
In [23]:
```
#Import Libraries
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
#np.set_printoptions(threshold=np.nan)


#Importing DataSet
dataset = pd.read_csv(r'C:\Users\soham\OneDrive\Desktop\20th- (S20)\SLR - House
space=dataset['sqft_living']
price=dataset['price']

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

#Splitting the data into Train and Test
from sklearn.model_selection import train_test_split
xtrain, xtest, ytrain, ytest = train_test_split(x,y,test_size=1/3, random_state=


#Fitting simple linear regression to the Training Set
from sklearn.linear_model import LinearRegression
regressor = LinearRegression()
regressor.fit(xtrain, ytrain)

#Predicting the prices
pred = regressor.predict(xtest)

#Visualizing the training Test Results
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()

#Visualizing the Test Results
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()
```




In [3]:
```
#Import Libraries
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
#np.set_printoptions(threshold=np.nan)
```

In [5]:
```
#Importing DataSet
dataset = pd.read_csv(r'C:\Users\soham\OneDrive\Desktop\20th- (S20)\SLR - House
space=dataset['sqft_living']
price=dataset['price']
```

In [7]:
```
x = np.array(space).reshape(-1, 1)
y = np.array(price)
```

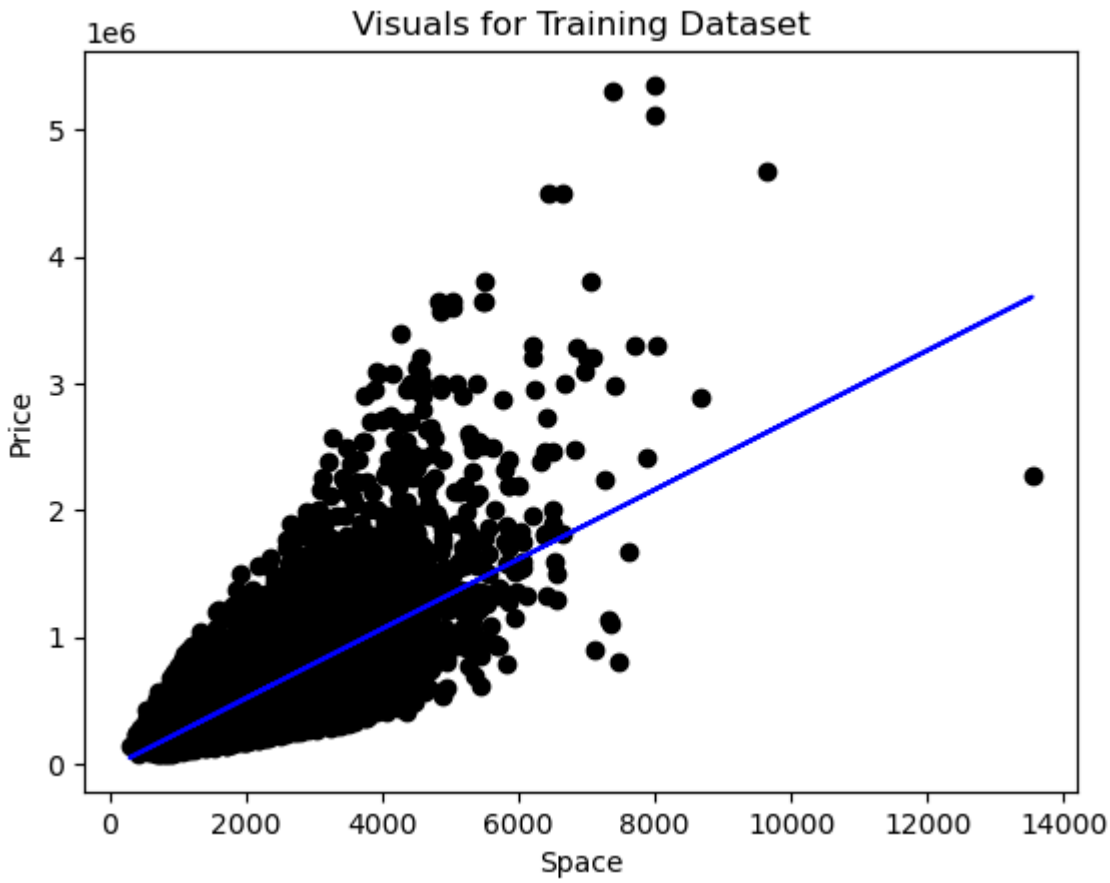
In [11]:
```
#Splitting the data into Train and Test
from sklearn.model_selection import train_test_split
xtrain, xtest, ytrain, ytest = train_test_split(x,y,test_size=1/3, random_state=
```

In [13]:
```
#Fitting simple linear regression to the Training Set
from sklearn.linear_model import LinearRegression
regressor = LinearRegression()
regressor.fit(xtrain, ytrain)
```

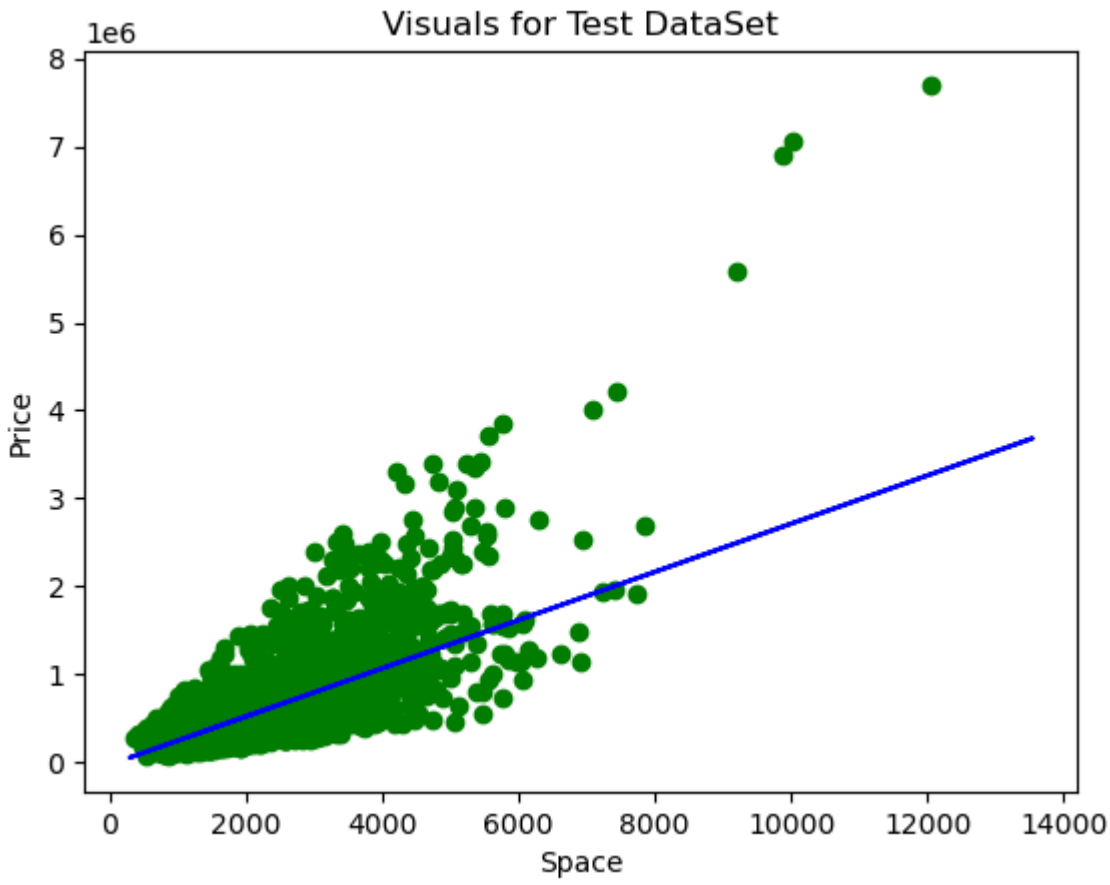
Out[13]:
```
LinearRegression
LinearRegression()
```

In [15]:
```
#Predicting the prices
pred = regressor.predict(xtest)
```

In [25]:
```
#Visualizing the training Test Results
plt.scatter(xtrain, ytrain, color= 'black')
plt.plot(xtrain, regressor.predict(xtrain), color = 'blue')
plt.title ("Visuals for Training Dataset")
plt.xlabel("Space")
plt.ylabel("Price")
plt.show()
```




In [27]:
```
#Visualizing the Test Results
plt.scatter(xtest, ytest, color= 'green')
plt.plot(xtrain, regressor.predict(xtrain), color = 'blue')
plt.title("Visuals for Test DataSet")
plt.xlabel("Space")
plt.ylabel("Price")
plt.show()
```


Visuals for Test DataSet
1e6
8
7
6
5
4
3
2
1
0
Price
0
2000
4000
6000
8000
10000
12000
14000
Space

In [ ]: