```
import numpy as np
import pandas as pd
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import sys
np.set_printoptions(threshold=np.inf)
import pickle

dataset = pd.read_csv(r'c:\Users\Hanshu\Desktop\excel data_ML\House_data.csv')
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=0)

# 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()


# save the pickle file
with open("house_price_model.pkl", "wb") as file:
    pickle.dump(regressor, file)
```

```
# load the pickle file
with open("house_price_model.pkl", "rb") as file:
    loaded_model = pickle.load(file)


print("Predicted price for 5051 sqft house:", loaded_model.predict([[5051]])[0])




import os
print("Current working directory:", os.getcwd())
```