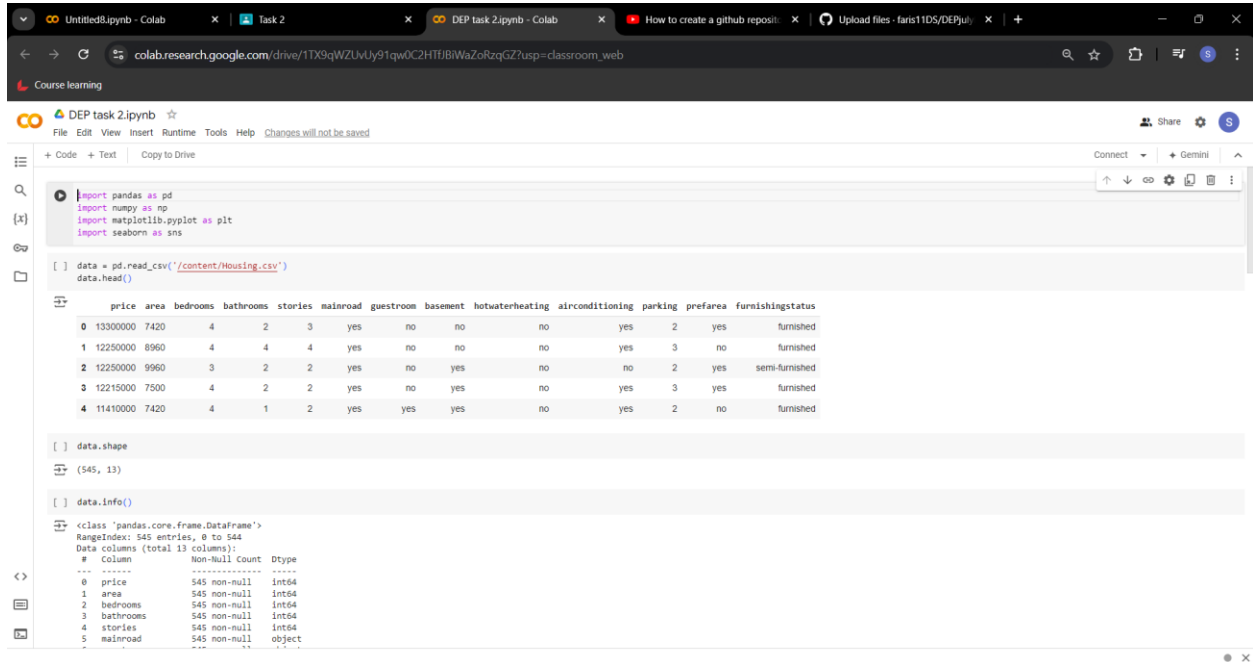


DEP TASK 2



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

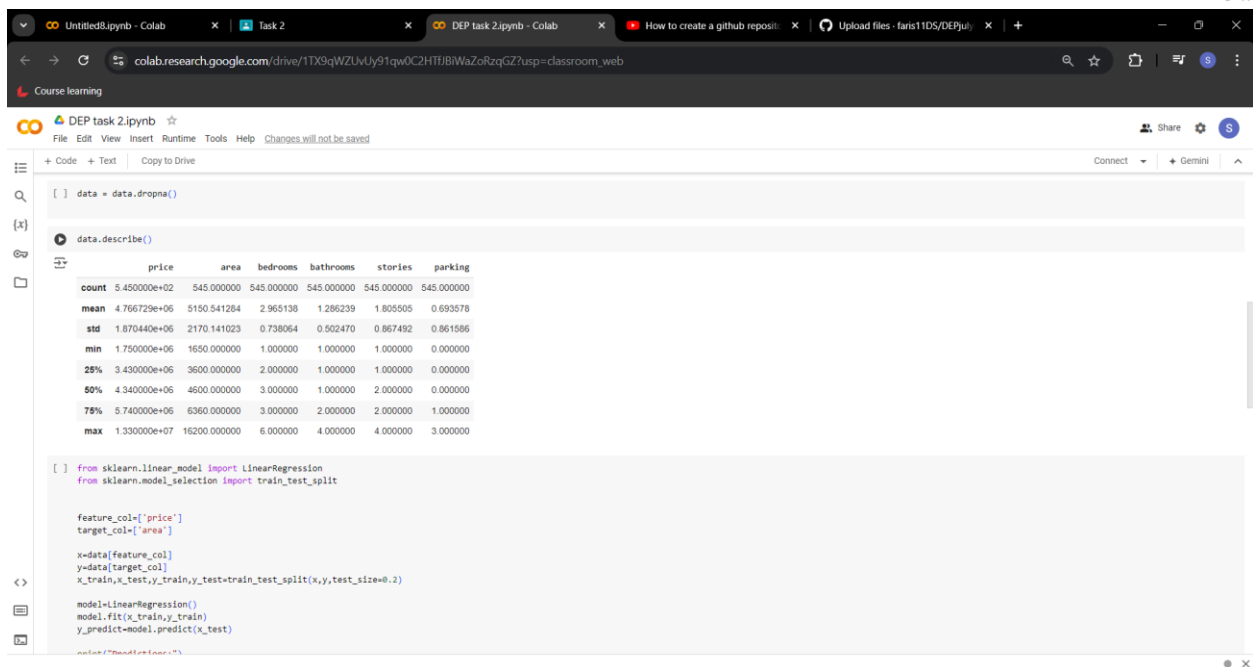
data = pd.read_csv('/content/Housing.csv')
data.head()
```

	price	area	bedrooms	bathrooms	stories	mainroad	guestroom	basement	hotwaterheating	airconditioning	parking	prefarea	furnishingstatus
0	13300000	7420	4	2	3	yes	no	no	no	yes	2	yes	furnished
1	12250000	8960	4	4	4	yes	no	no	no	yes	3	no	furnished
2	12250000	9960	3	2	2	yes	no	yes	no	no	2	yes	semi-furnished
3	12215000	7500	4	2	2	yes	no	yes	no	yes	3	yes	furnished
4	11410000	7420	4	1	2	yes	yes	yes	no	yes	2	no	furnished

```
[ ] data.shape
(545, 13)

[ ] data.info()
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 545 entries, 0 to 544
Data columns (total 13 columns):
 #   Column        Non-Null Count  Dtype  
---  --
 0   price         545 non-null    int64   
 1   area          545 non-null    int64   
 2   bedrooms      545 non-null    int64   
 3   bathrooms     545 non-null    int64   
 4   stories       545 non-null    int64   
 5   mainroad      545 non-null    object  

```



```
[ ] data = data.dropna()

data.describe()
```

	price	area	bedrooms	bathrooms	stories	parking
count	5.450000e+02	545.000000	545.000000	545.000000	545.000000	545.000000
mean	4.766729e+06	5150.541284	2.965138	1.286239	1.805505	0.693578
std	1.870440e+06	2170.141023	0.738064	0.502470	0.867492	0.861586
min	1.750000e+06	1650.000000	1.000000	1.000000	1.000000	0.000000
25%	3.430000e+06	3600.000000	2.000000	1.000000	1.000000	0.000000
50%	4.340000e+06	4600.000000	3.000000	1.000000	2.000000	0.000000
75%	5.740000e+06	6360.000000	3.000000	2.000000	2.000000	1.000000
max	1.330000e+07	16200.000000	6.000000	4.000000	4.000000	3.000000

```
[ ] from sklearn.linear_model import LinearRegression
from sklearn.model_selection import train_test_split

feature_col=['price']
target_col=['area']

x=data[feature_col]
y=data[target_col]
x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.2)

model=LinearRegression()
model.fit(x_train,y_train)
y_predict=model.predict(x_test)

print("Model trained")
```

SYED FARIS HUSSAIN NAQVI

