


```
import pandas as pd
import numpy as np
from sklearn import linear_model
import matplotlib.pyplot as plt
```

```
from google.colab import files
uploaded = files.upload()
```



 Choose Files homeprices...tiple_LR.csv

- **homeprices_Multiple_LR.csv**(text/csv) - 130 bytes, last modified: 3/17/2025 - 100% done

Saving homeprices Multiple LR.csv to homeprices Multiple LR.csv

```
import pandas as pd
```

```
df = pd.read_csv('homeprices_Multiple_LR.csv')
df.head()
```




	area	bedrooms	age	price
0	2600	3.0	20	550000
1	3000	4.0	15	565000
2	3200	NaN	18	610000
3	3600	3.0	30	595000
4	4000	5.0	8	760000

Next steps: [Generate code with df](#) [View recommended plots](#) [New interactive sheet](#)

```
df.bedrooms.median()
```

 4.0





```
df.bedrooms = df.bedrooms.fillna(df.bedrooms.median())
df
```

	area	bedrooms	age	price
0	2600	3.0	20	550000
1	3000	4.0	15	565000
2	3200	4.0	18	610000
3	3600	3.0	30	595000
4	4000	5.0	8	760000
5	4100	6.0	8	810000


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```
reg = linear_model.LinearRegression()
reg.fit(df.drop('price',axis='columns'),df.price)
```


  LinearRegression  

LinearRegression()

```
reg.coef_
reg.intercept_
```

 221323.00186540396

```
"""Find price of home with 3000 sqr ft area, 3 bedrooms, 40 year old"""
reg.predict([[3000, 3, 40]])
```

 /usr/local/lib/python3.11/dist-packages/sklearn/utils/validation.py:2739: UserWarning: X does not have valid feature names, but LinearRe
warnings.warn(
array([498408.25158031])

```
112.06244194*3000 + 23388.88007794*3 + -3231.71790863*40 + 221323.00186540384
```

```
↔ 498408.25157402386
```