```
import pandas as pd
import numpy as np
from sklearn import linear_model
```

```
df = pd.read_csv('/content/drive/MyDrive/Colab Notebooks/homeprices.csv')
df
```

	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
5	4100	6.0	8	810000

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

```
4.0
```

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

	area	bedrooms	age	price

Saved successfully!

2	3200	4.0	18	610000
3	3600	3.0	30	595000
4	4000	5.0	8	760000
5	4100	6.0	8	810000

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

```
LinearRegression(copy_X=True, fit_intercept=True, n_jobs=None, normalize=False)
```

```
reg.coef_
```

```
array([  112.06244194, 23388.88007794, -3231.71790863])
```

```
reg.intercept_
```

```
221323.00186540396
```

```
reg.predict([[3000, 3, 40]])
```

```
array([498408.25158031])
```

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

```
498408.25157402386
```

```
reg.predict([[2500, 4, 5]])
```

```
array([578876.03748933])
```

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