In [6]:
```
import pandas as pd
from sklearn import linear_model
```

In [7]:
```
df=pd.read_csv("homeprices.csv")
```

In [8]:
```
df
```

Out[8]:

	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

In [9]:
```
df.bedrooms.fillna(df.bedrooms.median(),inplace=True)
```

In [10]:
```
df
```

Out[10]:

	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

In [12]:
```
reg=linear_model.LinearRegression()
```

In [13]:
```
reg.fit(df[['area','bedrooms','age']],df.price)
```

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

In [14]:
```
reg.predict([[2300,4,10]])
```

```
C:\Users\Asus\AppData\Local\Programs\Python\Python311\Lib\site-packages\sklearn\base.py:464: UserWarning: X does not have valid feature names, but LinearRegression was fitted with feature names
  warnings.warn(
```

Out[14]:
```
array([540304.95955774])
```

In [15]:
```
import pickle
```

In [16]:
```
f=open('trainedmodel','wb')
```

In [17]:
```
pickle.dump(reg,f)
```

In [23]:
```
# here i learn how to save the train model
# this train model we can use later without training it again
# we can share this as well.
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[23], line 1
----> 1 joblib.dump(reg,"secondtrain")
```

```
NameError: name 'joblib' is not defined
```

In [ ]: