```
import pandas as pd
dataset = pd.read csv(r'./USA Housing.csv')
print(len(dataset['Address'].unique()))
5000
dataset.head()
                     Avg. Area House Age Avg. Area Number of Rooms \
   Avg. Area Income
0
       79545.458574
                                 5.682861
                                                             7.009188
1
                                 6.002900
                                                             6.730821
       79248.642455
2
       61287.067179
                                 5.865890
                                                             8.512727
3
       63345.240046
                                 7.188236
                                                             5.586729
4
       59982.197226
                                 5.040555
                                                             7.839388
   Avg. Area Number of Bedrooms Area Population
                                                          Price \
0
                            4.09
                                     23086.800503
                                                   1.059034e+06
1
                            3.09
                                     40173.072174
                                                   1.505891e+06
2
                            5.13
                                     36882.159400 1.058988e+06
3
                            3.26
                                     34310.242831
                                                   1.260617e+06
4
                            4.23
                                     26354.109472 6.309435e+05
                                              Address
   208 Michael Ferry Apt. 674\nLaurabury, NE 3701...
   188 Johnson Views Suite 079\nLake Kathleen, CA...
1
2
   9127 Elizabeth Stravenue\nDanieltown, WI 06482...
3
                           USS Barnett\nFP0 AP 44820
4
                          USNS Raymond\nFPO AE 09386
dataset = dataset.drop('Address', axis=1)
x = dataset.drop('Price', axis=1)
y = dataset['Price']
x.head()
   Avg. Area Income
                     Avg. Area House Age Avg. Area Number of Rooms \
0
       79545.458574
                                 5.682861
                                                             7.009188
1
       79248.642455
                                 6.002900
                                                             6.730821
2
       61287.067179
                                 5.865890
                                                             8.512727
3
       63345.240046
                                 7.188236
                                                             5.586729
       59982.197226
                                                             7.839388
                                 5.040555
                                Area Population
   Avg. Area Number of Bedrooms
0
                            4.09
                                     23086.800503
1
                            3.09
                                     40173.072174
2
                            5.13
                                     36882.159400
3
                            3.26
                                     34310.242831
4
                            4.23
                                     26354.109472
```

```
from sklearn.preprocessing import StandardScaler
scaler = StandardScaler()
x scaled = scaler.fit transform(x)
x_scaled
array([[ 1.02865969, -0.29692705, 0.02127433, 0.08806222, -
1.31759867],
       [ 1.00080775, 0.02590164, -0.25550611, -0.72230146,
0.40399945],
       [-0.68462916, -0.11230283, 1.5162435, 0.93084045,
0.07240989],
       [-0.48723454, 1.28447022, -2.17026949, -1.50025059, -
0.29193658],
       [-0.05459152, -0.44669439, 0.14154061, 1.18205319,
0.65111608],
       [-0.28831272, 0.01521477, -0.19434166, 0.07185495,
1.04162464]])
```