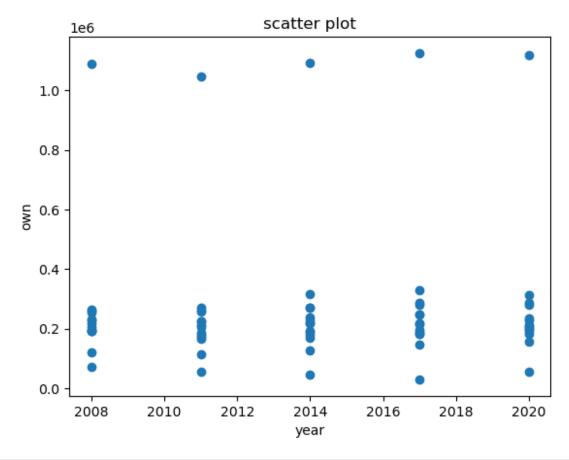
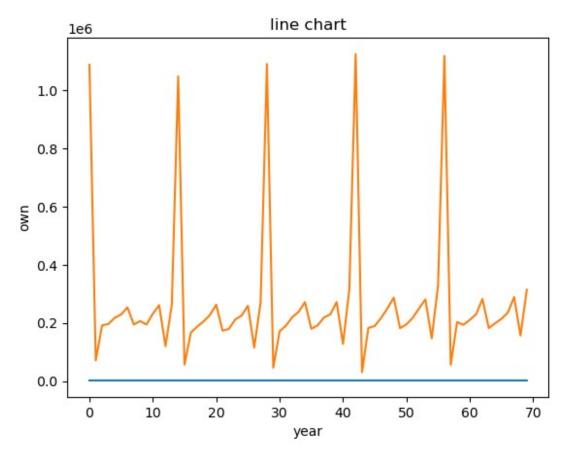
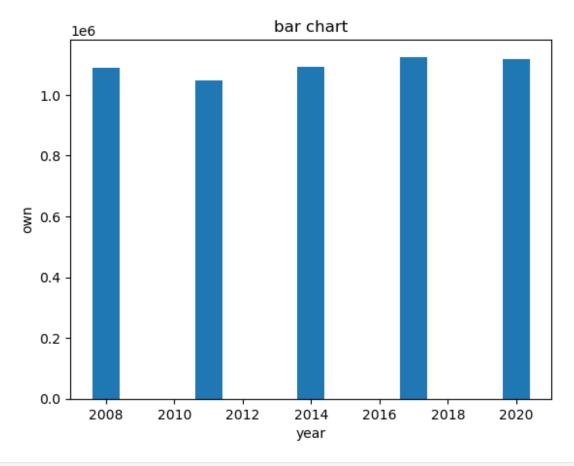
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
from datetime import datetime
data=pd.read csv('C:\\Users\\HP\\Downloads\\householdtask3.csv')
display(data.head(10))
   year tot hhs
                      own
                           own wm
                                   own prop own wm prop
                                                           prop hhs
age \
0 2008
         1560859 1087580
                           574406
                                       69.7
                                                     36.8
                                                              100.0
35.9
1 2008
          185965
                                                               11.9
                    71256
                          39405
                                        38.3
                                                     21.2
29.9
2 2008
          312376
                   191470
                            48424
                                        61.3
                                                     15.5
                                                               20.0
40.0
3 2008
                                       62.8
                                                               20.0
          312333
                   196203 84171
                                                     26.9
34.7
4 2008
          312240
                   217657 141318
                                        69.7
                                                     45.3
                                                               20.0
31.5
5 2008
          312336
                   229014 147658
                                        73.3
                                                     47.3
                                                               20.0
35.3
6 2008
          311574
                   253235 152835
                                        81.3
                                                     49.1
                                                               20.0
39.3
7 2008
          312761
                   194358
                            49448
                                        62.1
                                                     15.8
                                                               20.0
38.7
8 2008
          311973
                   206342 86390
                                        66.1
                                                     27.7
                                                               20.0
36.1
  2008
9
          311840
                   194361 108065
                                        62.3
                                                     34.7
                                                               20.0
33.0
                 expenditure
   size
         income
                              eqv income
                                          eqv exp
    2.7
0
          46704
                       42394
                                   26869
                                             25132
1
    2.6
          23404
                       25270
                                   14258
                                             15824
2
    2.3
                       21145
                                   13402
          16747
                                             14408
3
    2.8
          31308
                       29855
                                   18917
                                             18266
4
    3.0
          49106
                       46561
                                   26870
                                             24672
5
    2.6
          61674
                       52776
                                   36691
                                             31958
6
    2.5
          96861
                       72822
                                   55637
                                             42932
7
    2.5
          23680
                       16413
                                   15190
                                             11015
8
    2.7
          34155
                       29085
                                   20357
                                             18121
9
    2.8
          49771
                       42662
                                   27203
                                             25132
plt.scatter(data['year'],data['own'])
plt.title("scatter plot")
plt.xlabel('year')
plt.ylabel('own')
plt.show()
```



```
plt.plot(data['year'])
plt.plot(data['own'])
plt.title("line chart")
plt.xlabel('year')
plt.ylabel('own')
plt.show()
```



```
plt.bar(data['year'],data['own'])
plt.title("bar chart")
plt.xlabel('year')
plt.ylabel('own')
plt.show()
```



```
plt.hist(data['income'])
plt.title("histogram")
plt.show()
```

