task3

July 15, 2024

[1]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

[10]:
```
# Mount Google Drive
from google.colab import drive
drive.mount('/content/drive')

# Access and read the CSV
import pandas as pd

data_path = '/content/drive/My Drive/householdtask3.csv'  # Replace with your␣
 ↪file path
data = pd.read_csv(data_path)
```

```
Drive already mounted at /content/drive; to attempt to forcibly remount, call
drive.mount("/content/drive", force_remount=True).
```

[11]:
```
data.head(10)
```

[11]:

	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	71256	39405	38.3	21.2	11.9	29.9	
2	2008	312376	191470	48424	61.3	15.5	20.0	40.0	
3	2008	312333	196203	84171	62.8	26.9	20.0	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	
9	2008	311840	194361	108065	62.3	34.7	20.0	33.0	

	size	income	expenditure	eqv_income	eqv_exp
0	2.7	46704	42394	26869	25132
1	2.6	23404	25270	14258	15824
2	2.3	16747	21145	13402	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

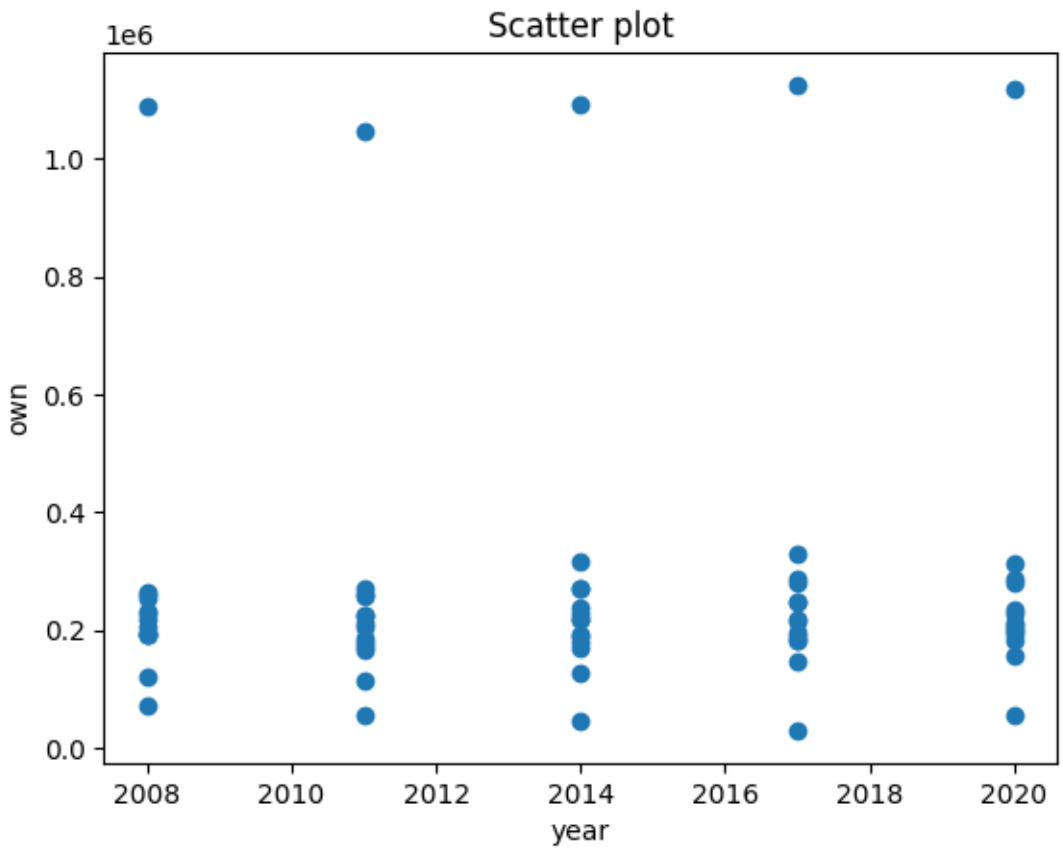
[15]:
```
#Scatter plot with year against own
plt.scatter(data['year'], data['own'])

#Adding tittle to the plot
plt.title('Scatter plot')

#Setting x and y labels
plt.xlabel('year')
plt.ylabel('own')

#Showing the chart
plt.show
```

[15]: <function matplotlib.pyplot.show(close=None, block=None)>



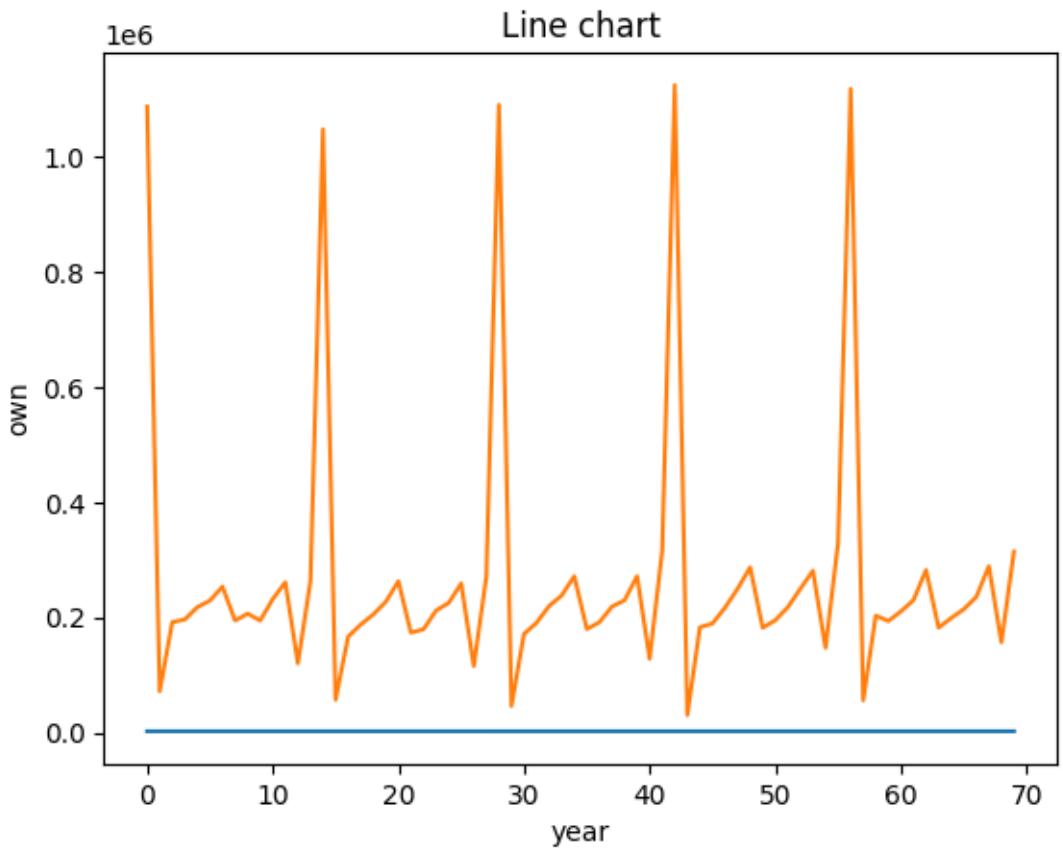
[16]:
```
#Line chart with year against own
plt.plot(data['year'])
plt.plot(data['own'])

#Adding tittle to the plot
plt.title('Line chart')

#Setting x and y labels
plt.xlabel('year')
plt.ylabel('own')

#Showing the chart
plt.show
```

[16]:
```
<function matplotlib.pyplot.show(close=None, block=None)>
```



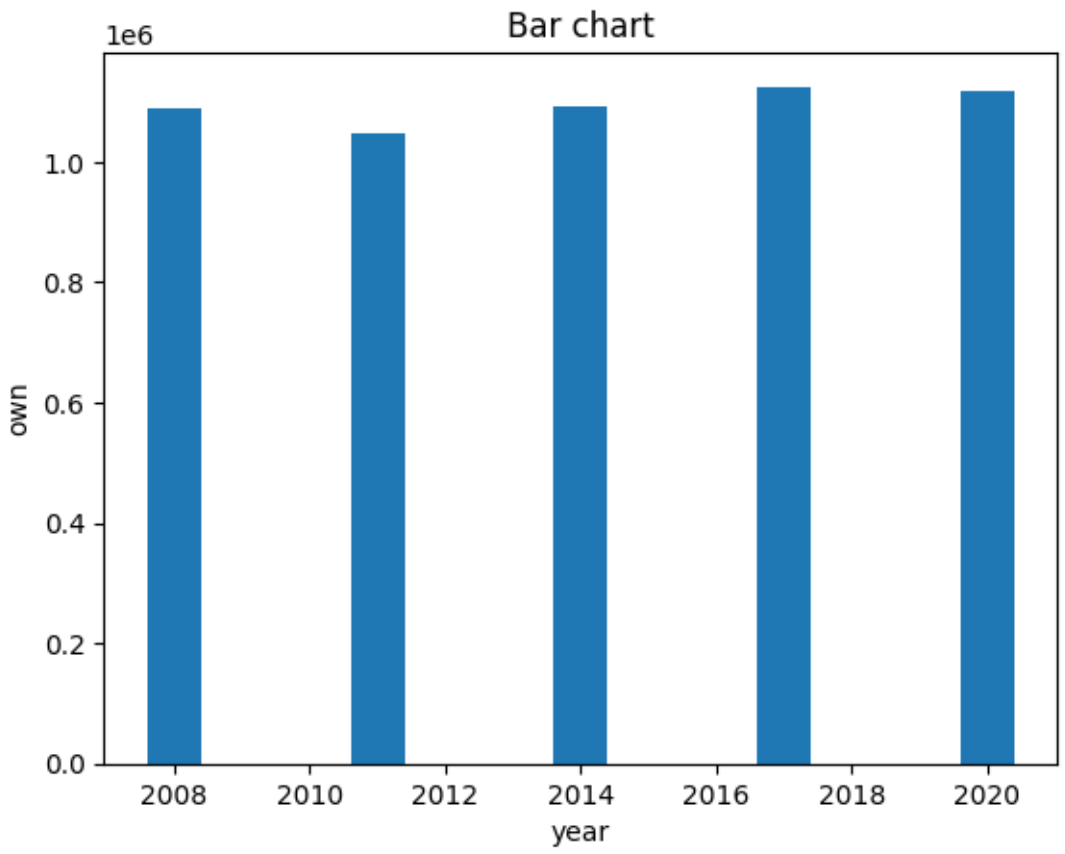
[17]:
```
#Bar chart or bar plot
plt.bar(data['year'], data['own'])
```

```
#Adding tittle to the plot
plt.title('Bar chart')

#Setting x and y labels
plt.xlabel('year')
plt.ylabel('own')

#Showing the chart
plt.show
```

[17]:
```
<function matplotlib.pyplot.show(close=None, block=None)>
```



[19]:
```
#Histogram
plt.hist(data['income'])

#Adding tittle to the plot
plt.title('Histogram')

#Showing the chart
```

```
plt.show
```

[19]: <function matplotlib.pyplot.show(close=None, block=None)>