

This task involves using the matplotlib library to visualize data. Customize the charts with labels, titles, and legends. Add some more for the steps in detail.:

```
# Import Libraries
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

# Load Data
data = pd.read_csv("/content/householdtask3.csv")

# Displaying the top ten values
display(data.head(10))
```

	year	tot_hhs	own	own_wm	own_prop	own_wm_prop	prop_hhs	age	size	income	expenditur
0	2008	1560859	1087580	574406	69.7	36.8	100.0	35.9	2.7	46704	4239
1	2008	185965	71256	39405	38.3	21.2	11.9	29.9	2.6	23404	2527
2	2008	312376	191470	48424	61.3	15.5	20.0	40.0	2.3	16747	2114
3	2008	312333	196203	84171	62.8	26.9	20.0	34.7	2.8	31308	2985
4	2008	312240	217657	141318	69.7	45.3	20.0	31.5	3.0	49106	4656
5	2008	312336	229014	147658	73.3	47.3	20.0	35.3	2.6	61674	5277
6	2008	311574	253235	152835	81.3	49.1	20.0	39.3	2.5	96861	7282
7	2008	312761	194358	49448	62.1	15.8	20.0	38.7	2.5	23680	1641
8	2008	311973	206342	86390	66.1	27.7	20.0	36.1	2.7	34155	2908
9	2008	311840	194361	108065	62.3	34.7	20.0	33.0	2.8	49771	4266

Visualize Data

```
# Scatter Plot

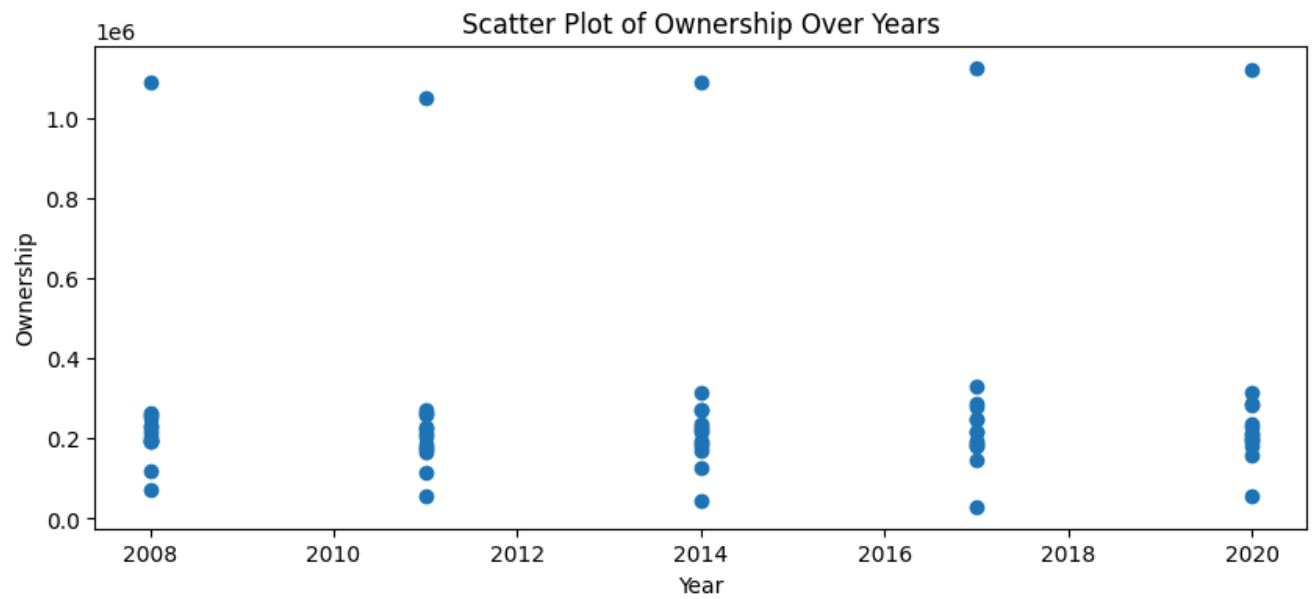
# Set figure size
plt.figure(figsize=(10, 4))

# Create a scatter plot
plt.scatter(data['year'], data['own'])

# Title
plt.title("Scatter Plot of Ownership Over Years")

# Labels
plt.xlabel("Year")
plt.ylabel("Ownership")

# Show Plot
plt.show()
```



```
# Line Chart
```

```
# Set figure size
```

```
plt.figure(figsize=(10, 4))
```

```
# Plot the line chart with labels
```

```
plt.plot(data['year'], data['own'], marker='o', linestyle='-', color='green', label='Ownership')
```

```
# Title
```

```
plt.title("Line Chart of Ownership Over Years")
```

```
# Labels
```

```
plt.xlabel("Year")
```

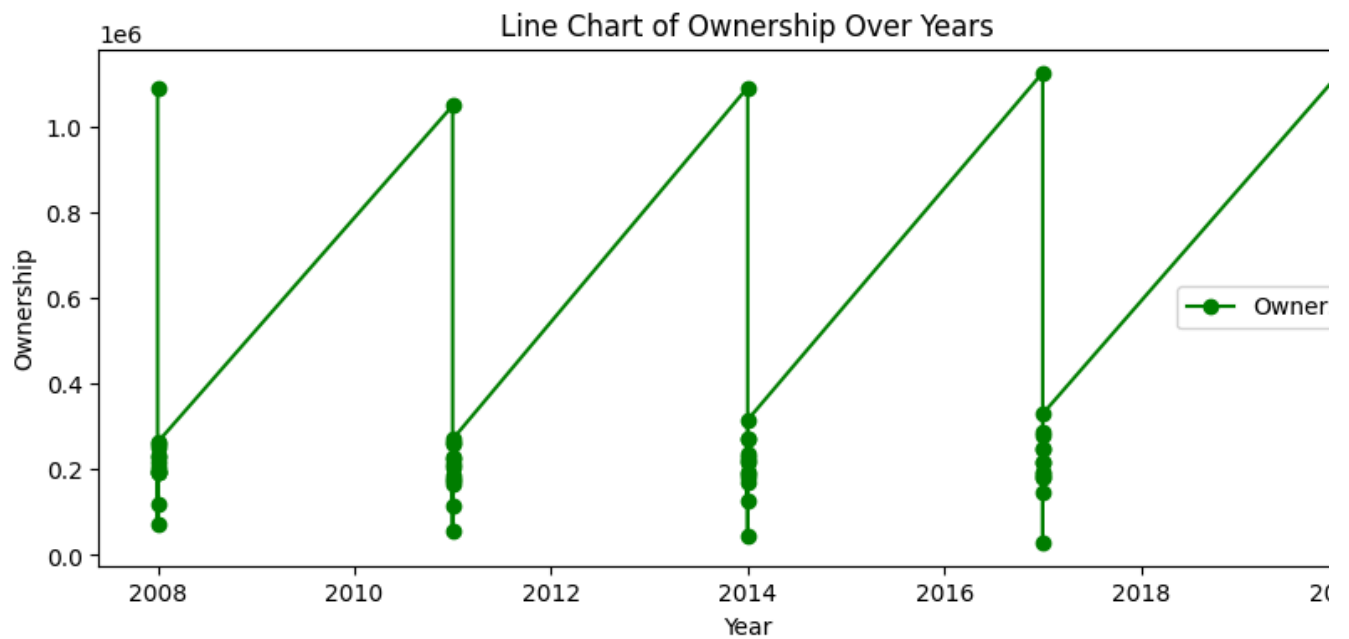
```
plt.ylabel("Ownership")
```

```
# Legend
```

```
plt.legend()
```

```
# Show Plot
```

```
plt.show()
```



```
# Histogram
```

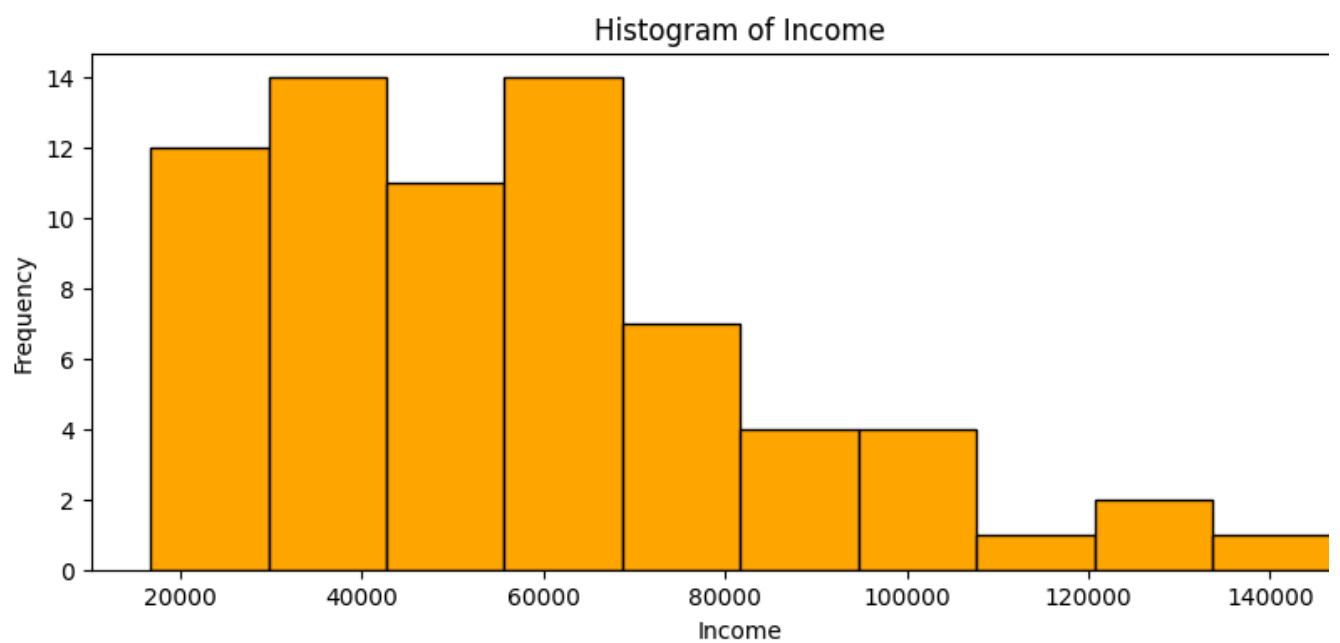
```
# Set figure size
plt.figure(figsize=(10, 4))
```

```
# Plot histogram of income
plt.hist(data['income'], color='orange', edgecolor='black')
```

```
# Title
plt.title("Histogram of Income")
```

```
# Labels
plt.xlabel("Income")
plt.ylabel("Frequency")
```

```
# Show Plot
plt.show()
```



```
# Bar Chart

# Set figure size
plt.figure(figsize=(10, 4))

# Create a bar chart
plt.bar(data['year'], data['own'], color='skyblue', label='Ownership')

# Title
plt.title("Bar Chart of Ownership Over Years")

# Labels
plt.xlabel("Year")
plt.ylabel("Ownership")

# Legend
plt.legend()

# Show Plot
plt.show()
```

