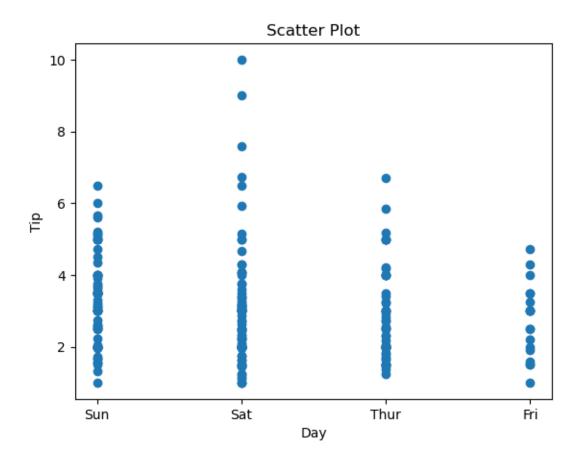
Data Analysis using Python-Task3

March 24, 2024

```
import pandas as pd
[2]: # Reading the database
     data = pd.read_csv("C:\\Users\\Dell\\Downloads\\tips.csv")
[3]: # Printing the top 10 rows
     display(data.head(10))
       total_bill
                    tip
                             sex smoker
                                         day
                                                time
                                                      size
    0
            16.99
                  1.01
                                                         2
                         Female
                                     No
                                         Sun
                                              Dinner
    1
            10.34 1.66
                           Male
                                         Sun
                                              Dinner
                                                         3
                                     No
    2
            21.01 3.50
                                                         3
                           Male
                                              Dinner
                                     No
                                         Sun
    3
            23.68 3.31
                           Male
                                     No
                                         Sun Dinner
                                                         2
    4
            24.59 3.61 Female
                                         Sun Dinner
                                                         4
                                     No
    5
            25.29 4.71
                           Male
                                     No
                                         Sun Dinner
                                                         4
             8.77 2.00
                                                         2
    6
                           Male
                                     No
                                         Sun Dinner
    7
            26.88 3.12
                           Male
                                     No
                                                         4
                                         Sun Dinner
                                                         2
    8
            15.04 1.96
                           Male
                                     No
                                         Sun Dinner
    9
            14.78 3.23
                                                         2
                           Male
                                     No
                                         Sun Dinner
[4]: import pandas as pd
     import matplotlib.pyplot as plt
     # Reading the database
     data = pd.read_csv("C:\\Users\\Dell\\Downloads\\tips.csv")
     # Scatter Plot with day against tip
     plt.scatter(data['day'], data['tip'])
     # Adding Title to the plot
     plt.title("Scatter Plot")
     # Setting the X and Y labels
     plt.xlabel('Day')
     plt.ylabel('Tip')
[4]: Text(0, 0.5, 'Tip')
```

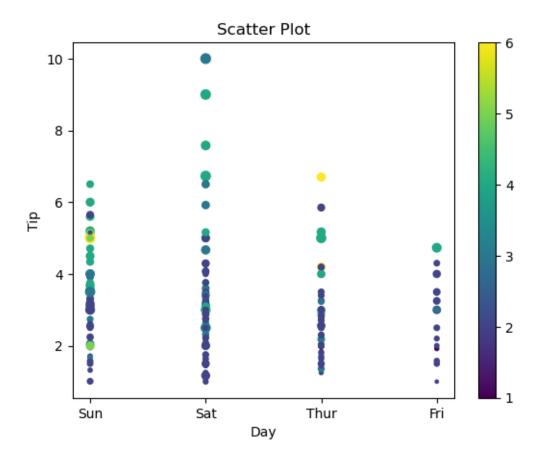


```
[5]: import pandas as pd
  import matplotlib.pyplot as plt

[6]: # Reading the database
  data = pd.read_csv("C:\\Users\\Dell\\Downloads\\tips.csv")

[7]: # Scatter plot with day against tip
  plt.scatter(data['day'], data['tip'], c=data['size'], s=data['total_bill'])
  # Adding Title to the plot
  plt.title("Scatter Plot")
  # Settingthe X and Y labels
  plt.xlabel('Day')
  plt.ylabel('Tip')

plt.colorbar()
  plt.show()
```

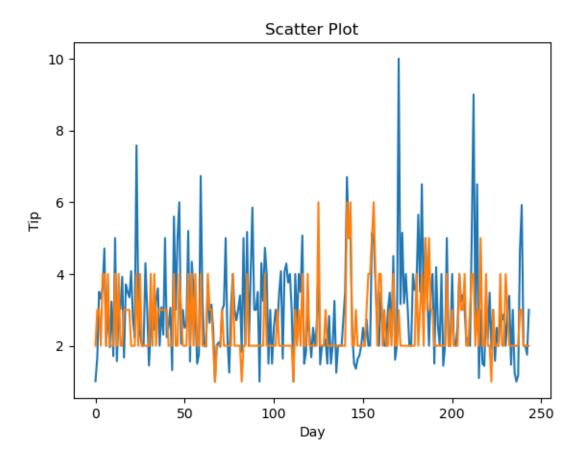


```
[8]: import pandas as pd
  import matplotlib.pyplot as plt

[9]: # Reading the database
  data = pd.read_csv("C:\\Users\\Dell\\Downloads\\tips.csv")

[10]: # Scatter plot with day against tip
  plt.plot(data['tip'])
  plt.plot(data['size'])
  # Adding Title to the plot
  plt.title("Scatter Plot")
  # Setting the X and Y labels
  plt.xlabel('Day')
  plt.ylabel('Tip')

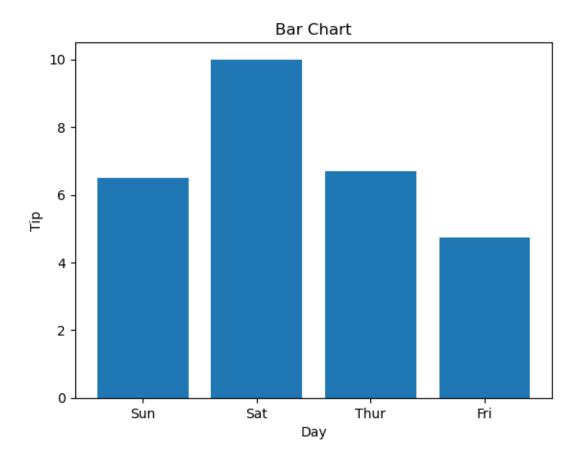
plt.show()
```



```
[11]: import pandas as pd
   import matplotlib.pyplot as plt

[12]: # Reading the database
   data = pd.read_csv("C:\\Users\\Dell\\Downloads\\tips.csv")

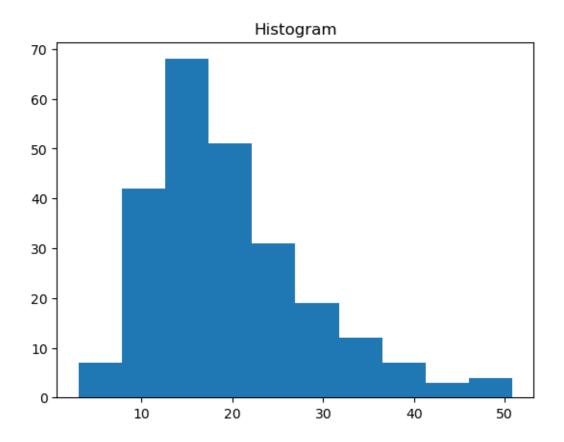
[14]: # Bar chart with day against tip
   plt.bar(data['day'], data['tip'])
        # Adding Title to the bar
   plt.title("Bar Chart")
        # Setting the X and Y labels
   plt.xlabel('Day')
   plt.ylabel('Tip')
        # Adding the legends
   plt.show()
```



```
[15]: import pandas as pd
  import matplotlib.pyplot as plt

[16]: # Reading the database
  data = pd.read_csv("C:\\Users\\Dell\\Downloads\\tips.csv")

[18]: # Histogram of total_bills
  plt.hist(data['total_bill'])
  # Adding Title to the Histogram
  plt.title("Histogram")
  # Adding the legends
  plt.show()
```



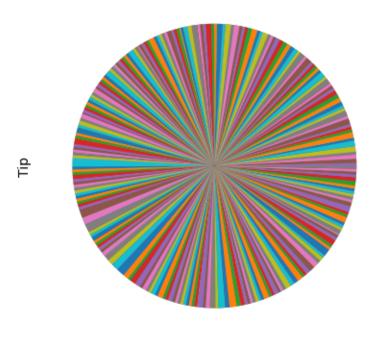
```
[1]: import pandas as pd
   import matplotlib.pyplot as plt

[2]: # Reading the database
   data = pd.read_csv("C:\\Users\\Dell\\Downloads\\tips.csv")

[23]: # Pie chart with day against tip
   plt.pie(data['tip'])
   plt.pie(data['size'])
   # Adding Title to the pie
   plt.title("Pie Chart")
   # Setting the X and Y labels
   plt.xlabel('Day')
   plt.ylabel('Tip')

   plt.show()
```





Day

[]: