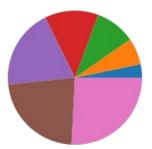
## To perform data visualization on given data sets using Matplotlib

```
In [1]:
           #Name: Siddhi N. Sakharkar
           #Roll no.: 51
           #Sec:B
 In [2]:
           import numpy as np
           from matplotlib import pyplot as plt
 In [2]:
           x = np.arange(1, 11)
 In [4]:
           print(x)
          [12345678910]
In [10]:
           y1 = x * 2
           print(y1)
          [ 2 4 6 8 10 12 14 16 18 20]
 In [7]:
           plt.plot(x,y)
plt.title("Line Chart")
           plt.xlabel("Height")
           plt.ylabel("Weight")
           plt.show()
                                    Line Chart
            20.0
            17.5
            15.0
          12.5
10.0
             7.5
             5.0
             2.5
                                      Height
In [9]:
           plt.bar(x,y)
           plt.title("Bar Chart")
plt.xlabel("Height")
           plt.ylabel("Weight")
           plt.show()
                                    Bar Chart
            20.0
            17.5
            15.0
            12.5
          10.0
             7.5
             5.0
             2.5
             0.0
```

To [101.

```
In [18]: a = (1,4,7,2,8,3,6)
           b = (32,56,78,23,11,22,34)
            plt.scatter(a,b)
           plt.title("scatter plot")
plt.xlabel("Height")
           plt.ylabel("Weight")
            plt.show()
                                    scatter plot
             80
             70
             60
           Weight
40
             50
             30
             20
             10
                                       Height
In [19]:
           H = [1,1,1,2,3,3,4,5,6,4,4,4,5,6,6,6,7,7,8,8,9,9,9,10,10,10,10]
           print(H)
           [1,\ 1,\ 1,\ 2,\ 3,\ 3,\ 4,\ 5,\ 6,\ 4,\ 4,\ 4,\ 5,\ 6,\ 6,\ 6,\ 7,\ 7,\ 8,\ 8,\ 9,\ 9,\ 9,\ 10,\ 10,\ 10,\ 10]
In [23]:
            plt.hist(H , color = 'r')
           plt.show()
           4.0
           3.5
           3.0
           2.5
           2.0
           1.5
           1.0
           0.5
           0.0
                     2
                                4
                                          6
                                                    8
In [24]:
            B = [1,2,3,4,5,6,7,8]
           plt.boxplot(B)
plt.show()
           8
           7
           6
           4
           3
           2
           1
In [27]:
           a = [2,4,6,8,12,14,16]
           plt.pie(a)
```

plt.show()



In [ ]:

Loading [MathJax]/jax/output/CommonHTML/fonts/TeX/fontdata.js