DATA VISUALIZATION

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In [2]: #Name : Ashwini V Kayande
         #Roll No : 60
         #Section : 3A
         #Date :27/07/2024
 In [4]: #Aim : to perform data visualization
 In [6]: import numpy as np
         from matplotlib import pyplot as plt
 In [8]: x=np.arange(1,11)
In [10]: x
Out[10]: array([ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10])
In [12]: y=2*x
In [14]: y
Out[14]: array([ 2, 4, 6, 8, 10, 12, 14, 16, 18, 20])
In [16]: plt.plot(x,y)
         plt.title("Line chart")
         plt.xlabel("x axis")
         plt.ylabel("y axis")
         plt.show()
```

20.0 -17.5 -15.0 -12.5 -10.0 -7.5 -

```
In [18]: plt.bar(x,y)
    plt.title("Bar chart")
    plt.xlabel("x axis")
    plt.ylabel("y axis")
    plt.show()
```

6

x axis

8

10

4

5.0

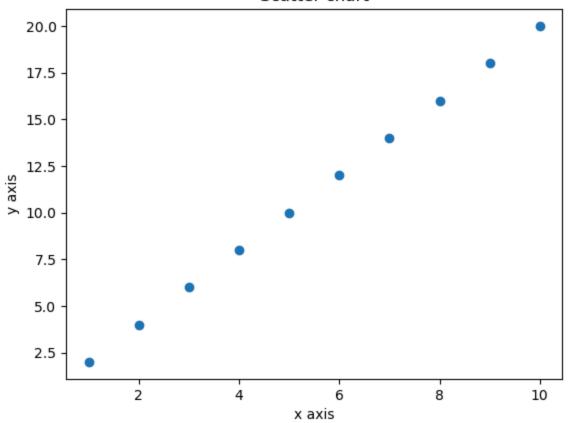
2.5

2

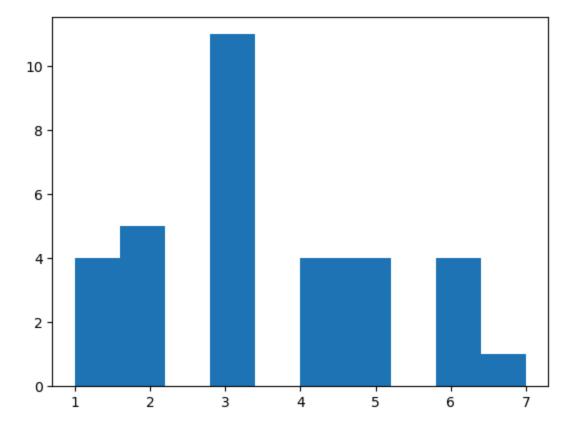
Bar chart 20.0 17.5 15.0 12.5 y axis 10.0 7.5 5.0 2.5 0.0 4 6 8 10 x axis

```
In [20]: plt.scatter(x,y)
    plt.title("Scatter chart")
    plt.xlabel("x axis")
    plt.ylabel("y axis")
    plt.show()
```

Scatter chart



```
In [22]: H=1,2,3,3,4,6,7,4,3,2,1,2,3,4,5,5,6,6,5,4,3,3,3,3,3,3,3,3,5,6,2,1,1,2
In [24]: plt.hist(H)
plt.show()
```



In []: