

To perform data visualization on given data sets using Matplotlib

```
In [1]: #Name: Shruti .P. Arsode  
#Roll no.: 03  
#Sec:'A'
```

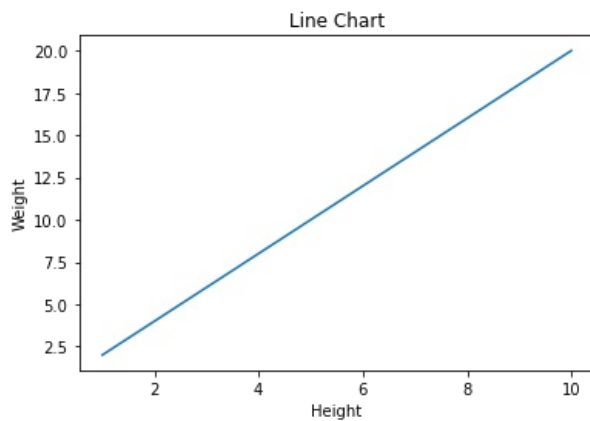
```
In [2]: import numpy as np  
from matplotlib import pyplot as plt
```

```
In [2]: x = np.arange(1 , 11)
```

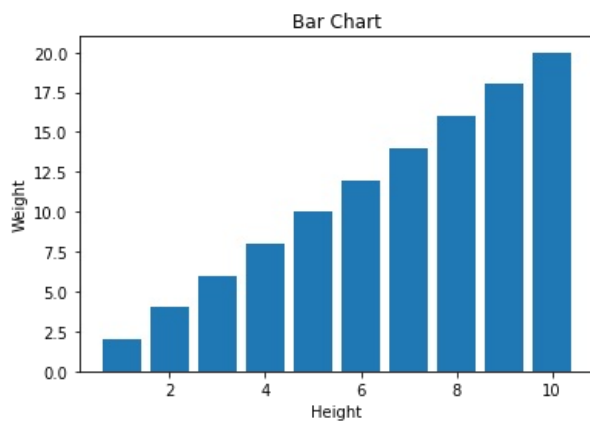
```
In [4]: print(x)  
  
[ 1  2  3  4  5  6  7  8  9 10]
```

```
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()
```



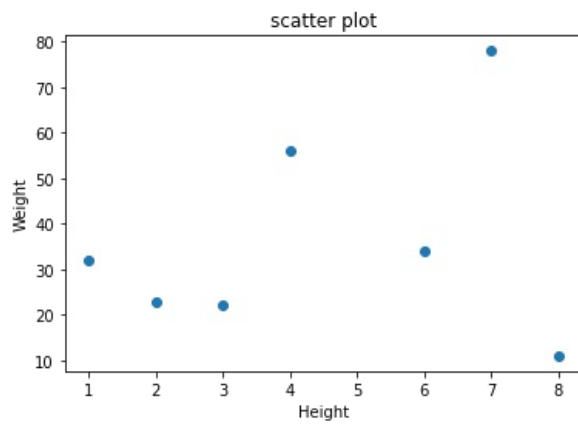
```
In [9]: plt.bar(x,y)  
plt.title("Bar Chart")  
plt.xlabel("Height")  
plt.ylabel("Weight")  
plt.show()
```



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()
```



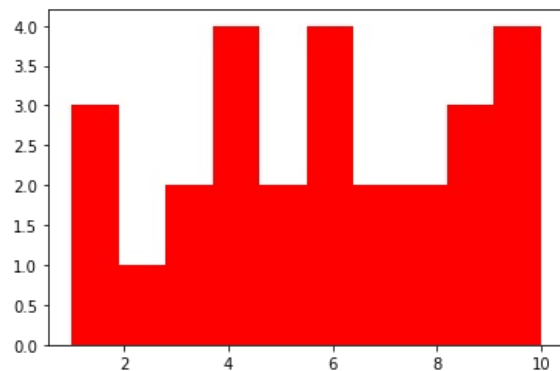
In [19]:

```
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]
```

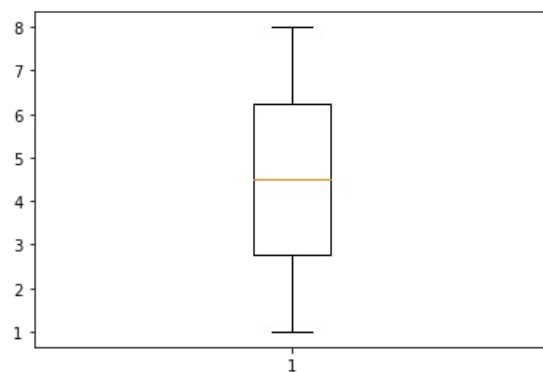
In [23]:

```
plt.hist(H , color = 'r')
plt.show()
```



In [24]:

```
B = [1,2,3,4,5,6,7,8]
plt.boxplot(B)
plt.show()
```



In [27]:

```
a = [2,4,6,8,12,14,16]
plt.pie(a)
plt.show()
```



In []:

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