In [1]:
```
# Aim: To perform data visualization on given data set usinh Matplotlib
```

In [2]:
```
# Name : Kaushal A. Bharade
# class : 3rd year
# Section : A
# Roll No. : 11
```

In [3]:
```
import numpy as np
from matplotlib import pyplot as plt
```

In [4]:
```
x= np.arange(1,11)
```

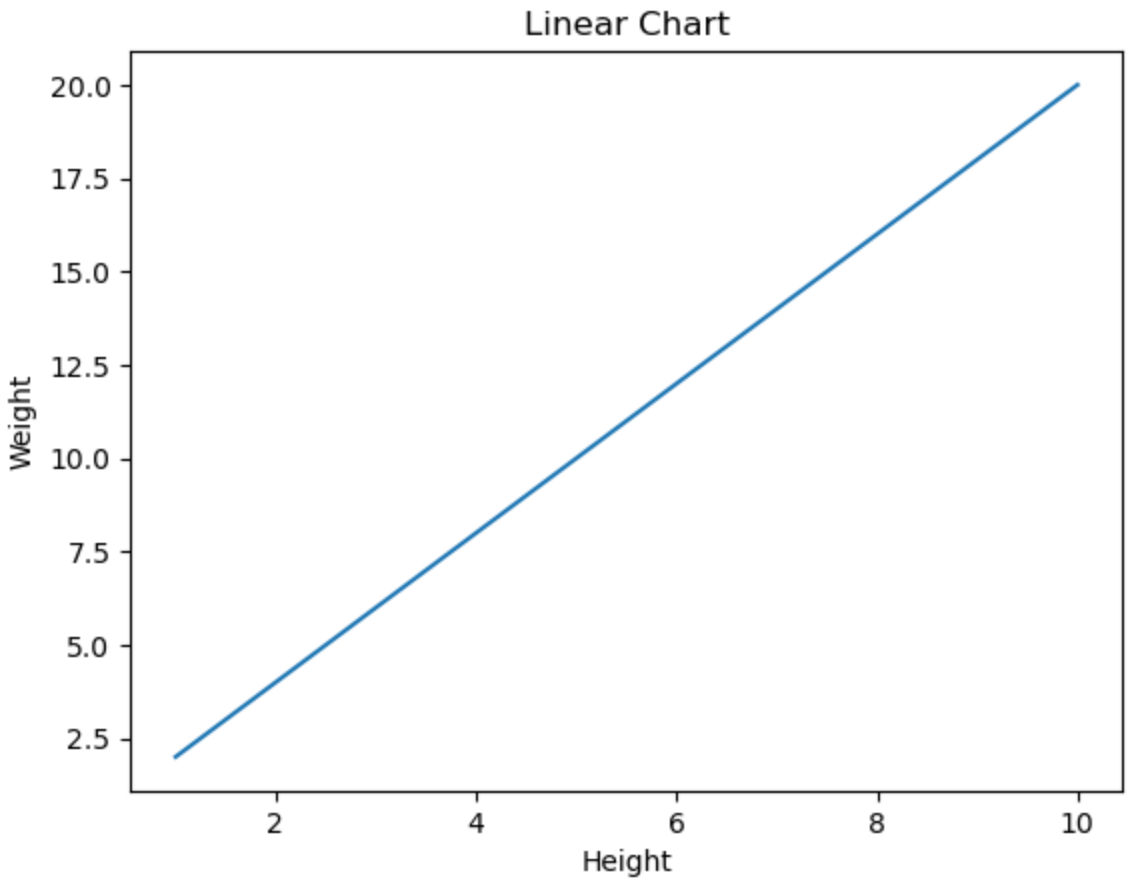
In [5]:
```
print(x)
```

```
[ 1  2  3  4  5  6  7  8  9 10]
```

In [6]:
```
y = x*2
print(y)
```

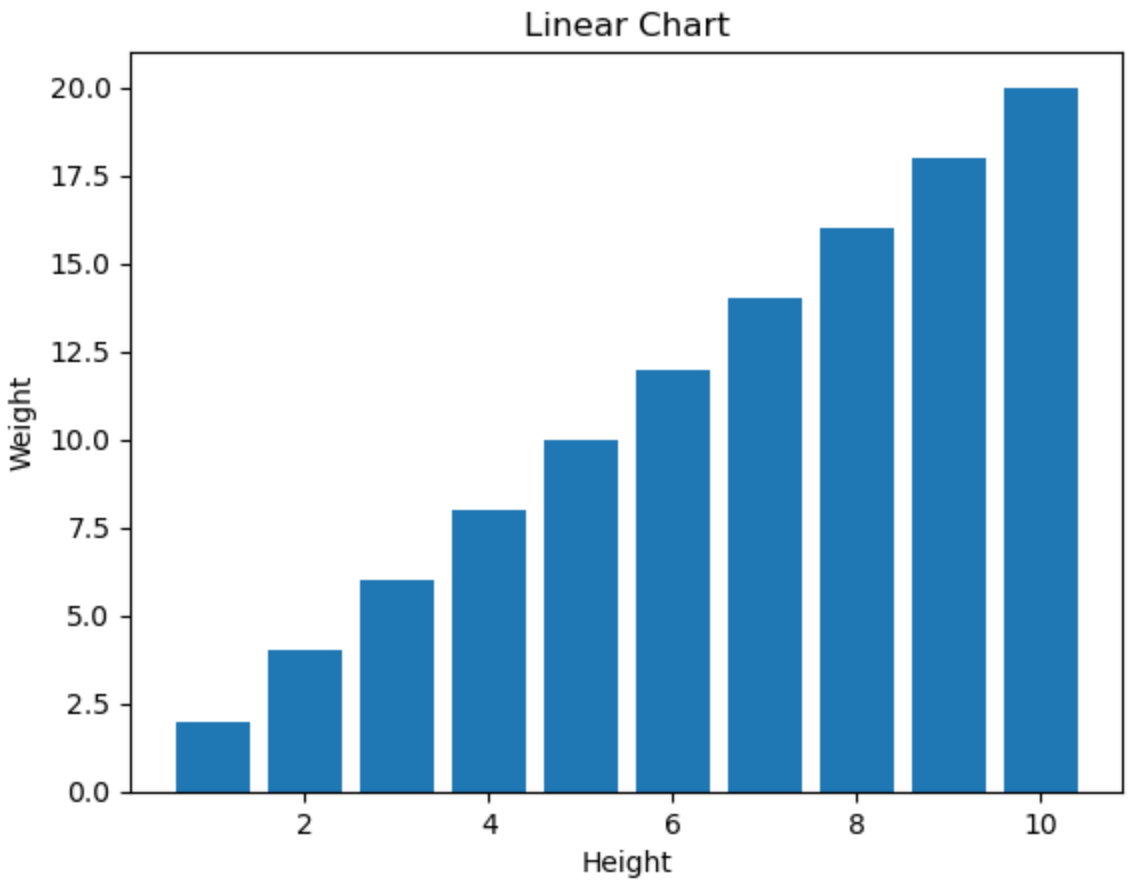
```
[ 2  4  6  8 10 12 14 16 18 20]
```

In [7]:
```
plt.plot(x,y)
plt.title("Linear Chart")
plt.xlabel("Height")
plt.ylabel("Weight")
plt.show()
```



In [8]:
```
plt.bar(x,y)
plt.title("Linear Chart")
plt.xlabel("Height")
plt.ylabel("Weight")
plt.show()
```

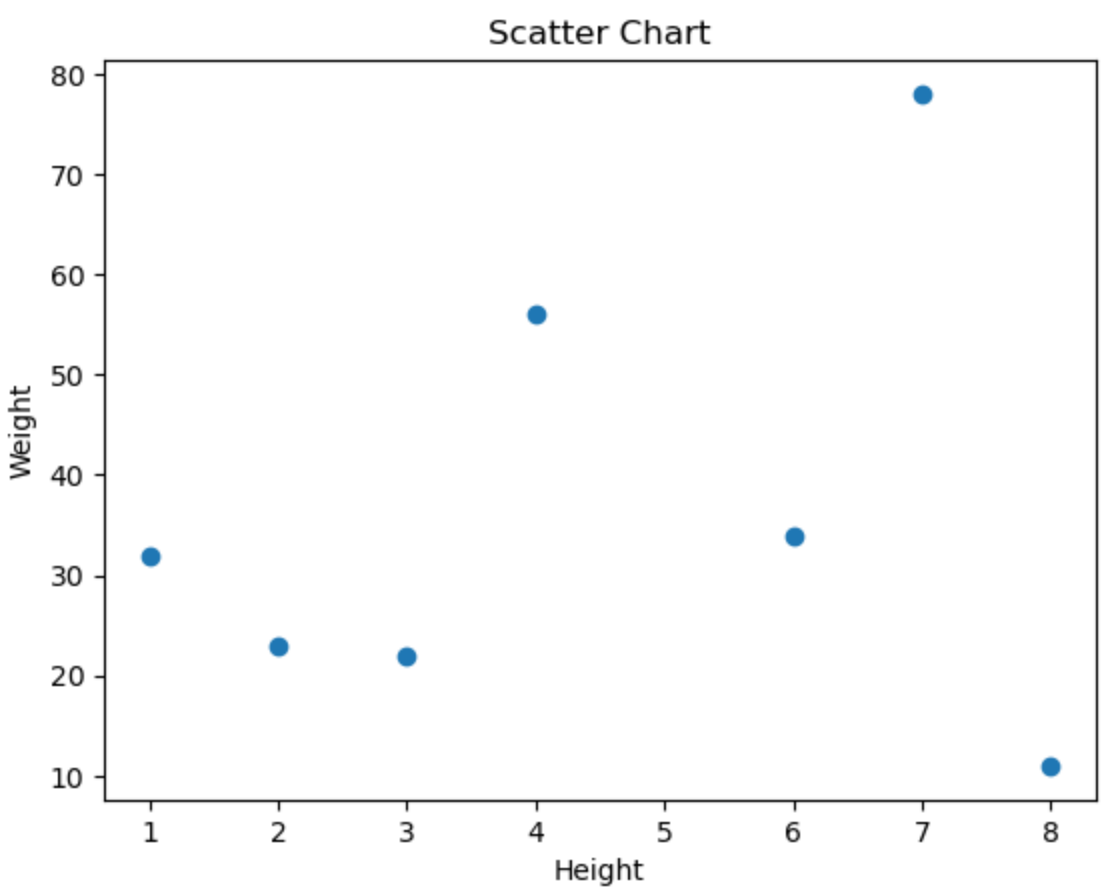
Loading [MathJax]/extensions/Safe.js



In [9]:
```
a = (1,4,7,2,8,3,6)
b = (32,56,78,23,11,22,34)

plt.scatter(a,b)
plt.title("Scatter Chart")
plt.xlabel("Height")
plt.ylabel("Weight")
plt.show()
```

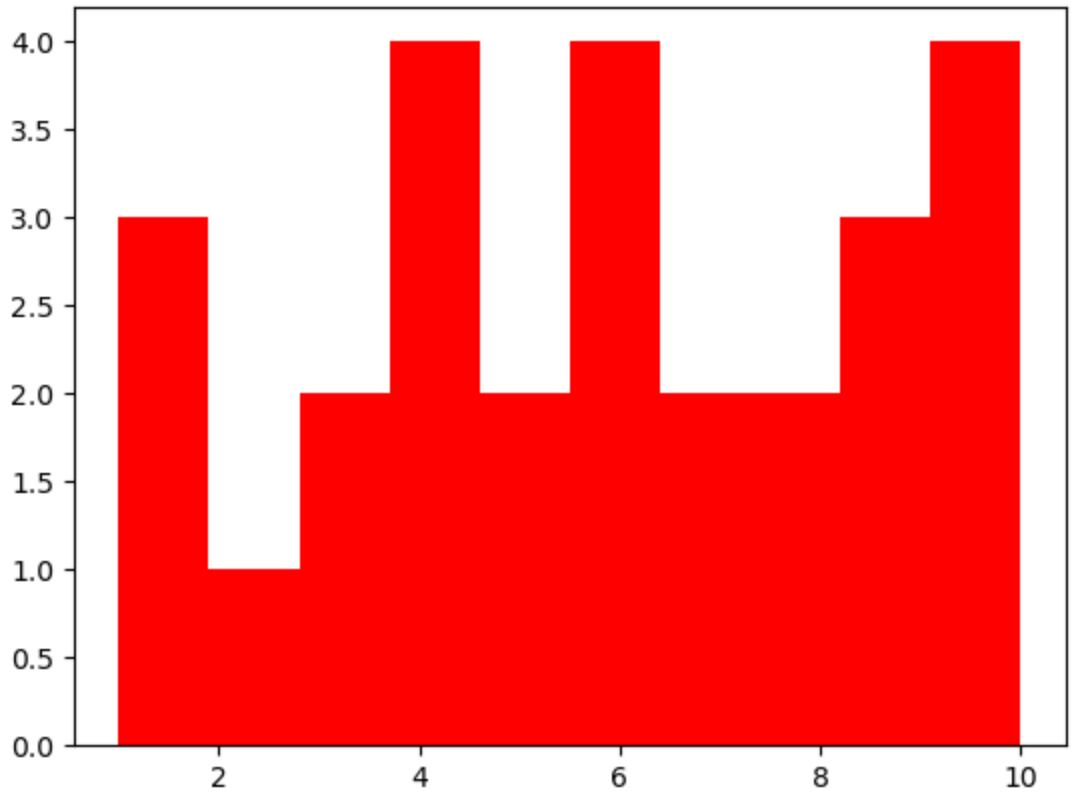
Loading [MathJax]/extensions/Safe.js



In [10]:
```
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)
```

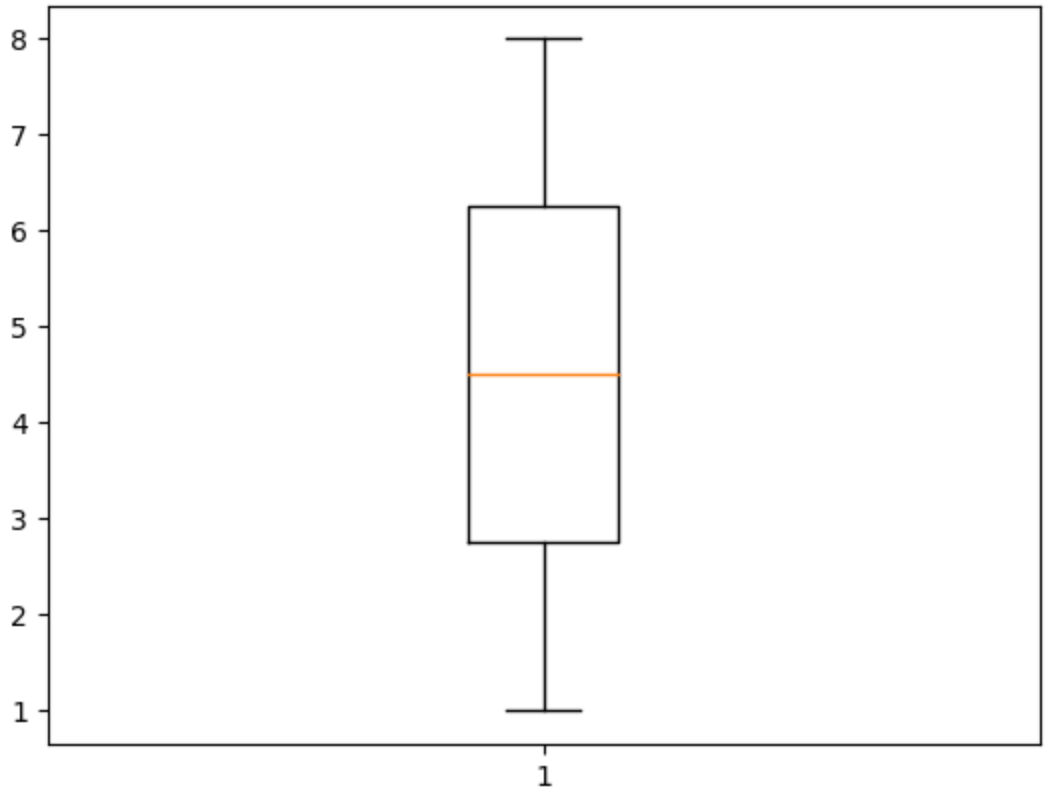
```
[1, 1, 1, 2, 3, 3, 4, 5, 6, 4, 4, 4, 5, 6, 6, 6, 7, 7, 8, 8, 9, 9, 9, 10, 10, 10, 10]
```

In [11]:
```
plt.hist(H, color = 'r')
plt.show()
```



Loading [MathJax]/extensions/Safe.js

In [12]:
```
B = [1,2,3,4,5,6,7,8]
plt.boxplot(B)
plt.show()
```



In [13]:
```
a = [2,4,6,8,12,14,16]
plt.pie(a)
plt.show()
```

In [ ]:
```

```

Loading [MathJax]/extensions/Safe.js