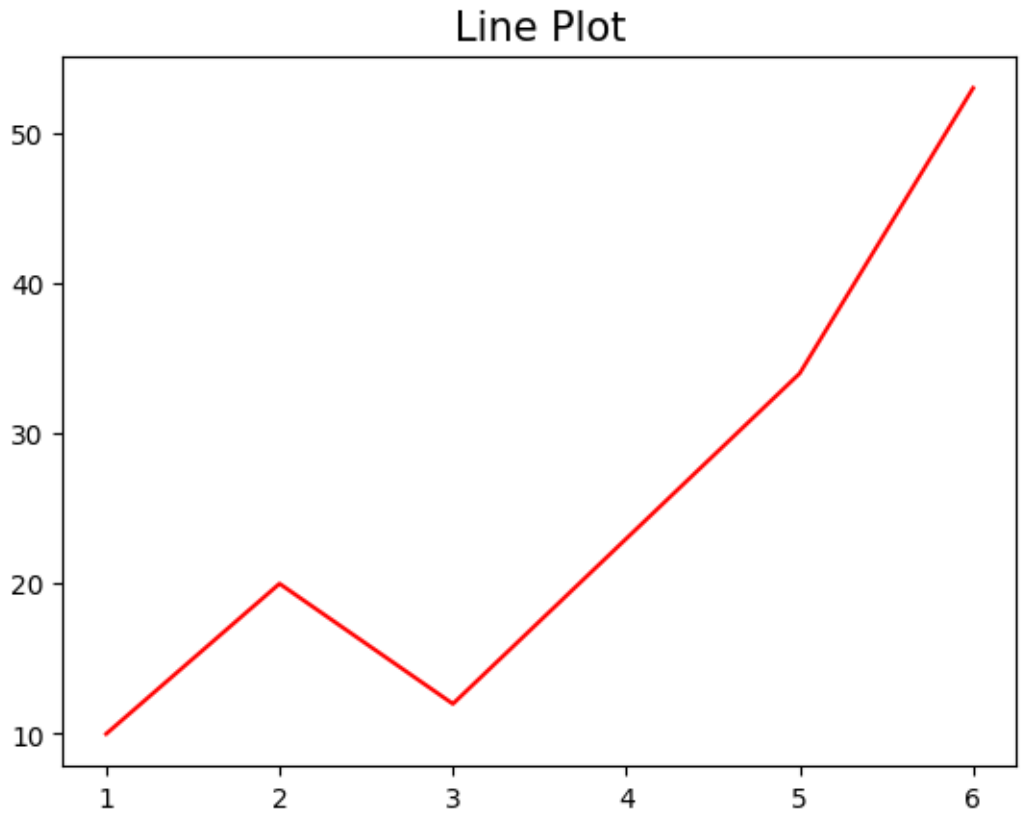
Practical 23

Write a python program to do line plotting, scatter plotting, Bar chart, box plot , histogram and pie chart.

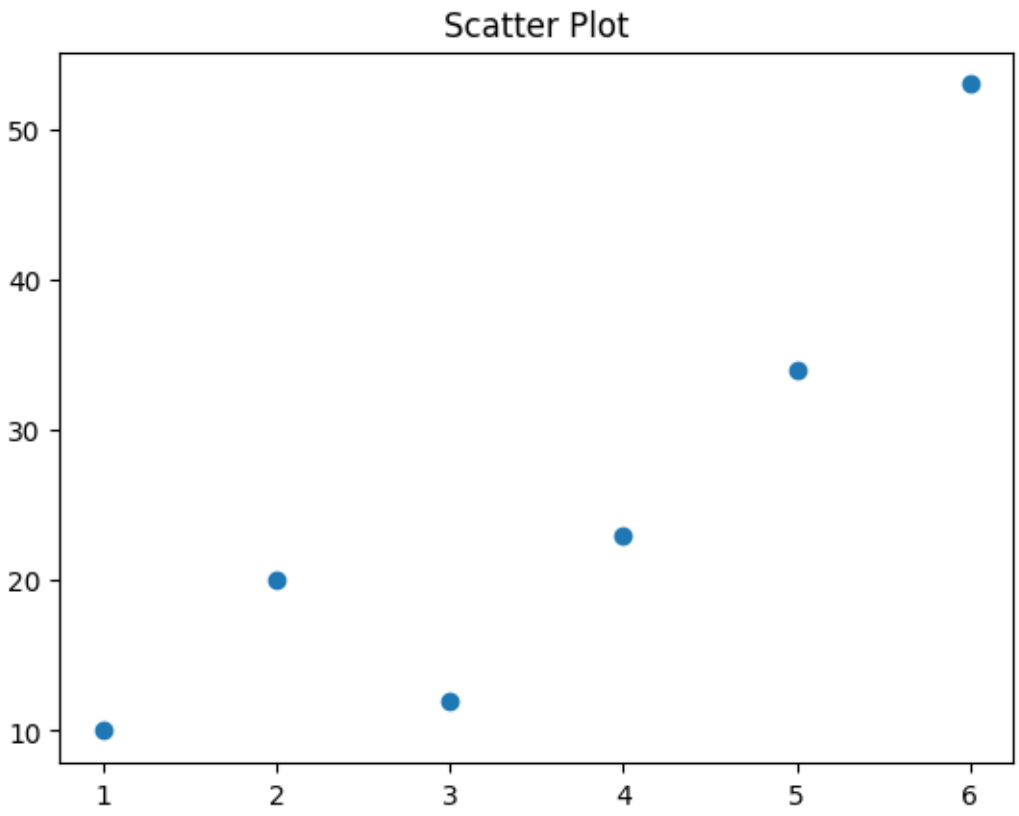
[1]:
```
import matplotlib.pyplot as plt
import numpy as np
```

[2]:
```
x = [1,2,3,4,5,6]
y = [10, 20, 12, 23, 34, 53]
plt.plot(x, y, color="red")
plt.title("Line Plot", fontsize=15)
plt.show()
```

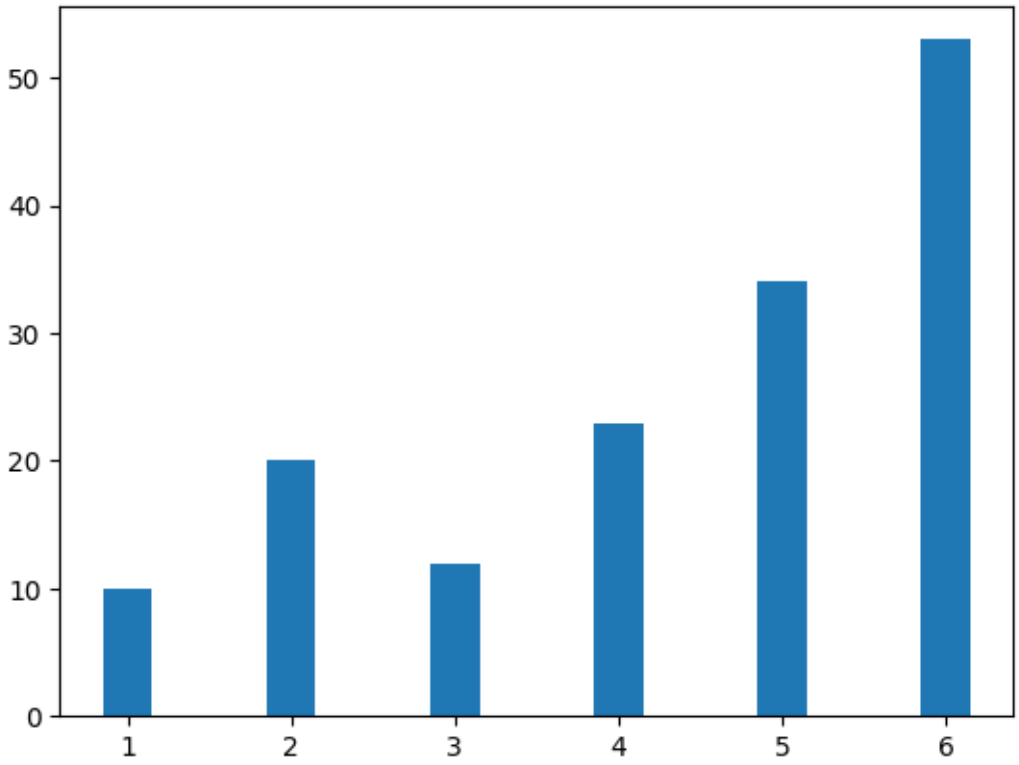


[3]:
```
plt.scatter(x, y)
plt.title("Scatter Plot")
```

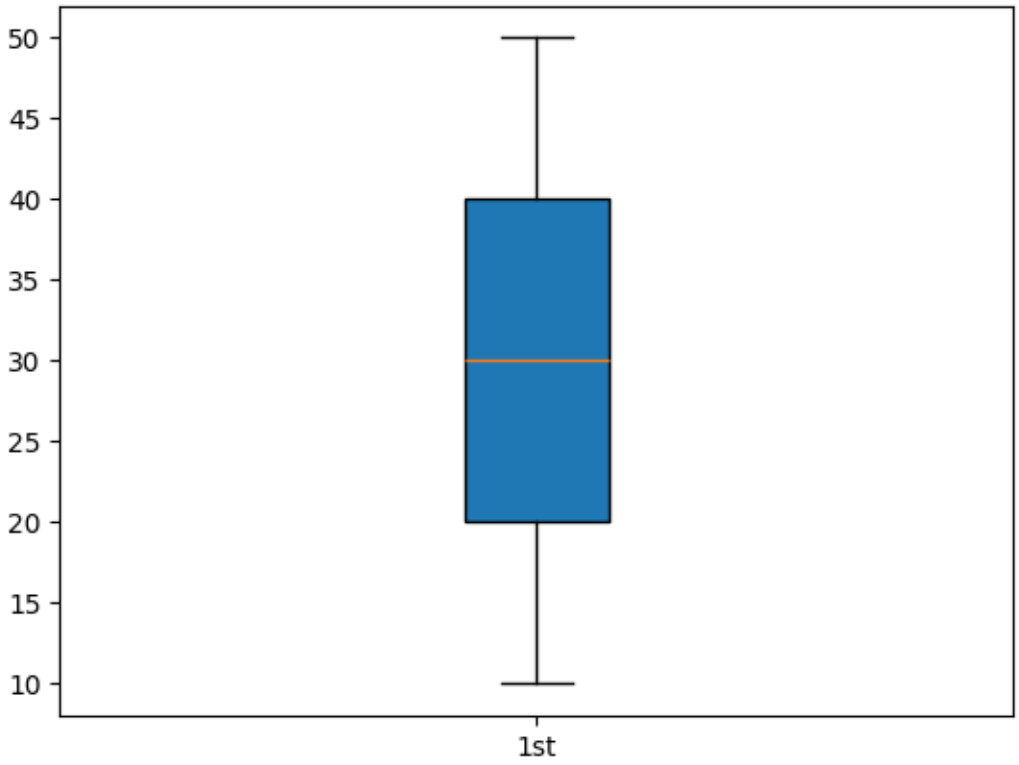
[3]:
```
Text(0.5, 1.0, 'Scatter Plot')
```



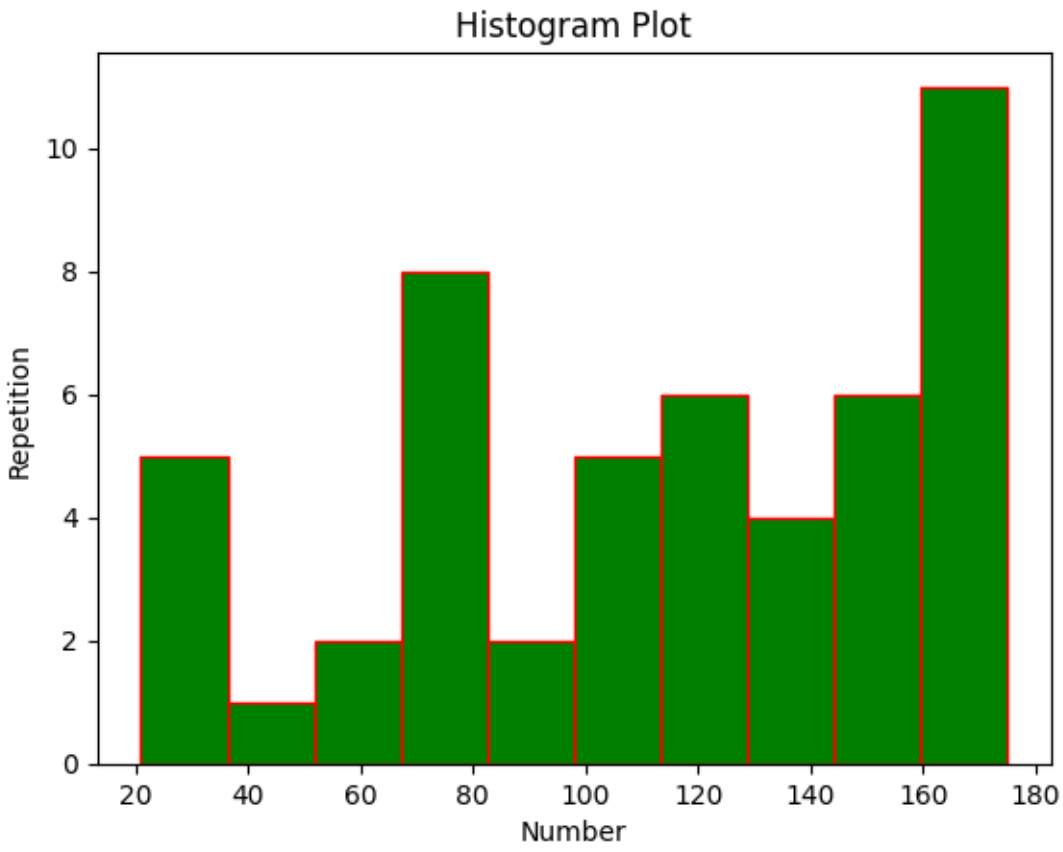
[5]:
```
plt.bar(x, y, width=0.3)
plt.show()
```



[6]:
```
x = [10,20,30,40,50]
plt.boxplot(x,labels = ["1st"],patch_artist = True)
plt.show()
```



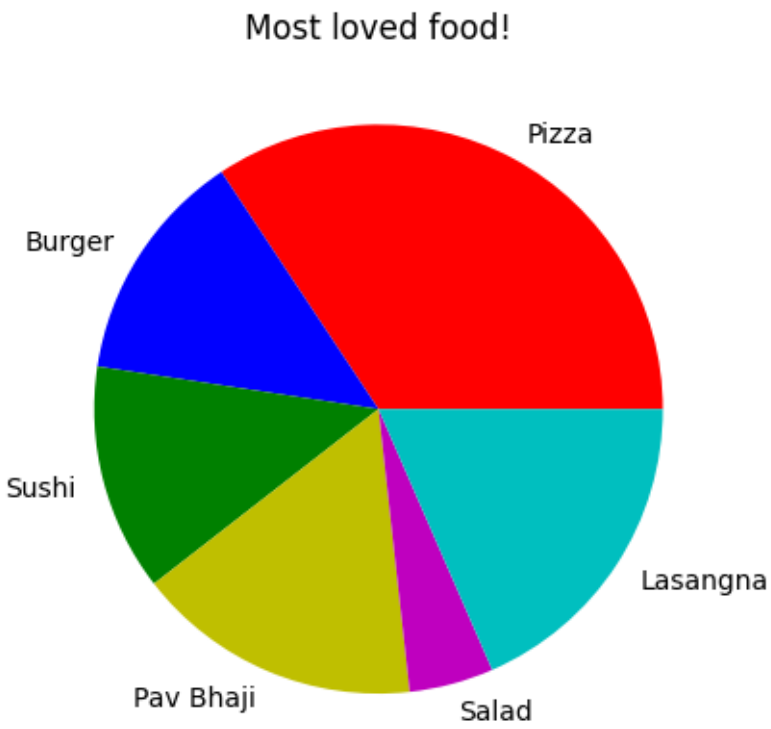
[9]:
```
x = np.random.randint(20,180,(50))
plt.hist(x, color="green", edgecolor="red")
plt.title("Histogram Plot")
plt.xlabel("Number")
plt.ylabel("Repetition")
plt.show()
```



[13]:
```
import random

x = [random.randint(0, 100) for i in range(6)]
y = ["Pizza", "Burger", "Sushi", "Pav Bhaji", "Salad", "Lasangna"]

plt.pie(x, labels=y, colors=["r", "b", "g", "y", "m", "c"])
plt.title("Most loved food!")
plt.show()
```


Most loved food!
Pizza
Burger
Sushi
Lasangna
Pav Bhaji
Salad