



## ASSIGNMENT - 1

**Q1) Draw a line chart.**

```
import numpy as np

import matplotlib.pyplot as plt

user = int(input("Enter number of data: "))

x = np.arange(user)

y = []

for i in range (0, user):

    value = int(input("Enter value: "))

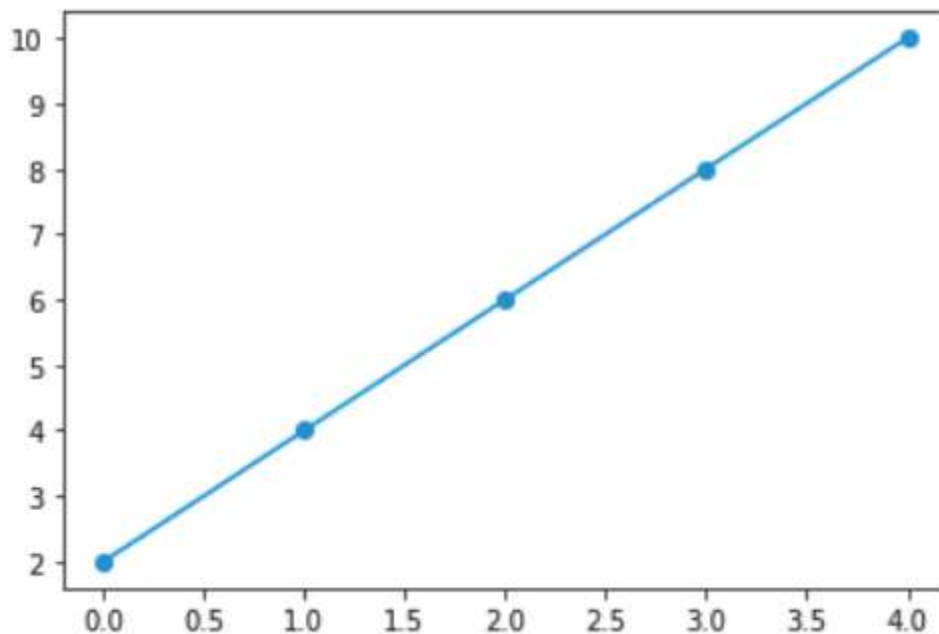
    y.append(value)

y = np.array(y)

plt.scatter(x, y)

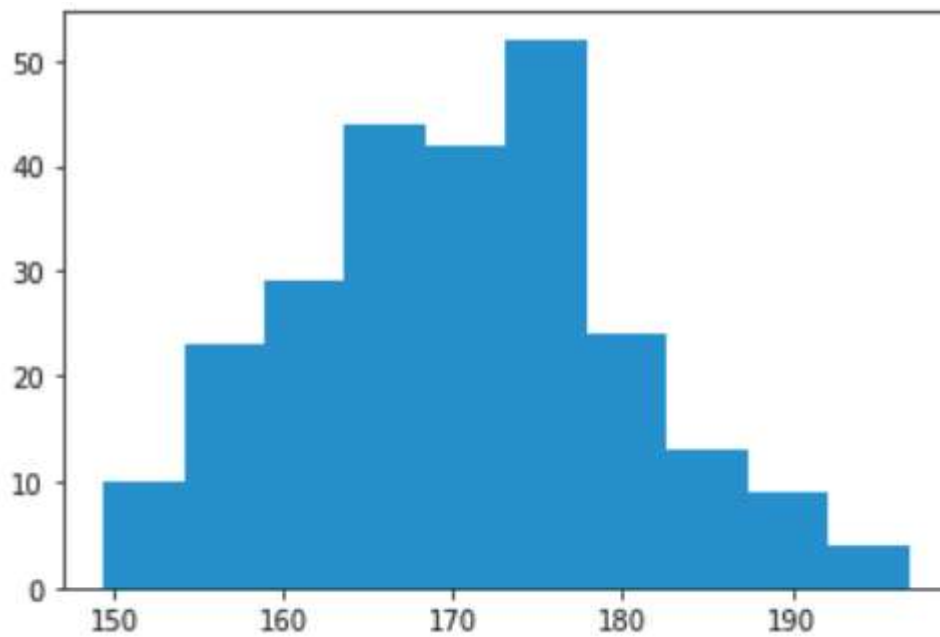
plt.plot(x, y)

plt.show()
```



**Q2) Draw a histogram.**

```
import matplotlib.pyplot as plt  
import numpy as np  
x = np.random.normal(170, 10, 250)  
plt.hist(x)  
plt.show()
```

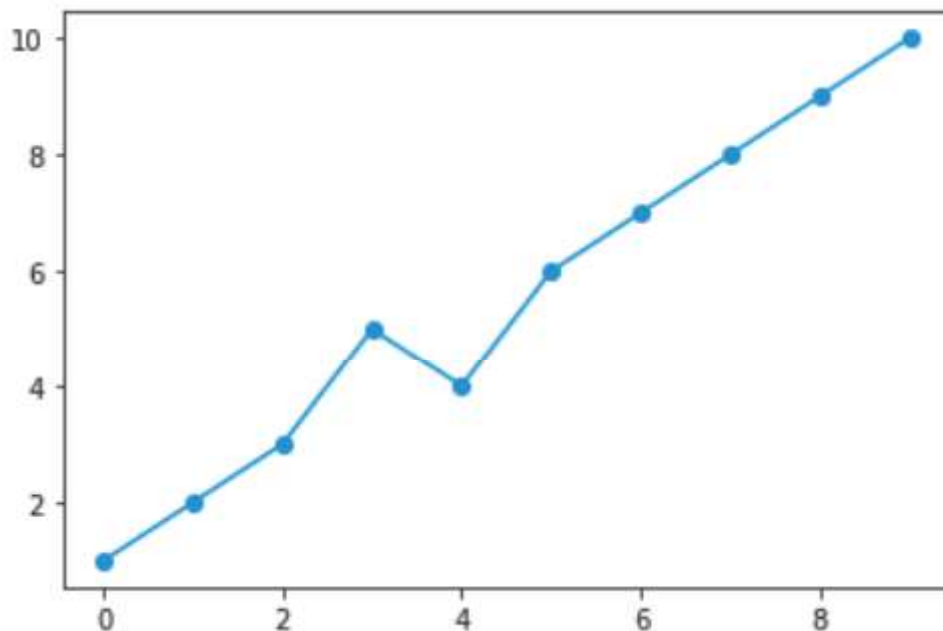




## ASSIGNMENT - 2

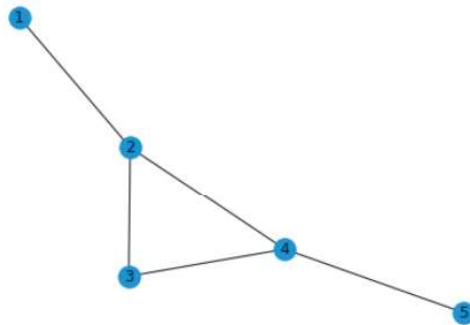
**Q1) Draw a line graph (Input from the user).**

```
import numpy as np
import matplotlib.pyplot as plt
user = int(input("Enter number of data: "))
x = np.arange(user)
y = []
for i in range (0, user):
    value = int(input("Enter value: "))
    y.append(value)
y = np.array(y)
plt.scatter(x, y)
plt.plot(x, y)
plt.show()
```



**Q2)Plot a graph**

```
import networkx as nx  
g = nx.Graph()  
g.add_edge(1, 2)  
g.add_edge(2, 3)  
g.add_edge(3, 4)  
g.add_edge(2, 4)  
g.add_edge(4, 5)  
nx.draw(g, with_labels = True)
```



**Q3)Draw a complete graph of 4 nodes.**

```
import networkx  
G = networkx.complete_graph(4)  
networkx.draw(G, node_color = 'black',node_size = 1500)
```

