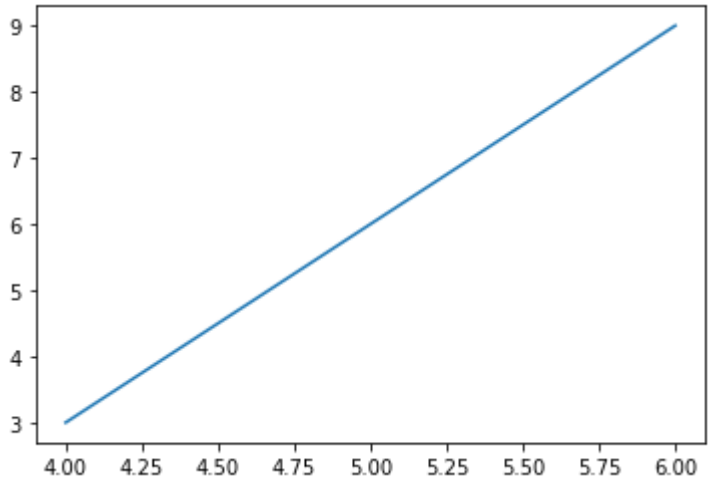
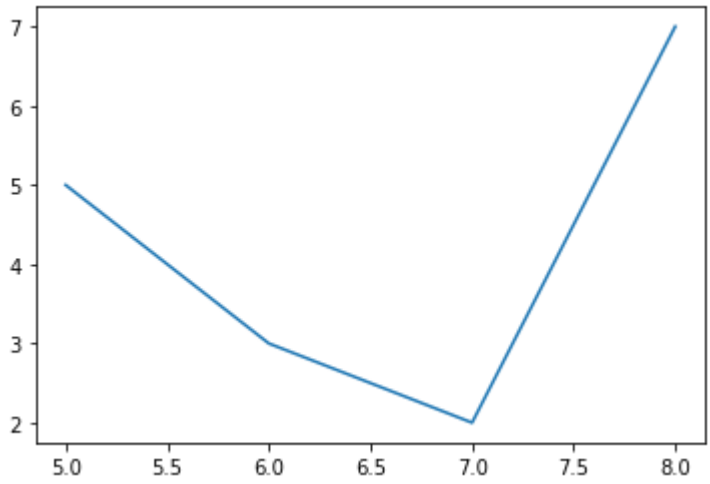
Matplotlib

```
import matplotlib.pyplot as plt
%matplotlib inline
import pandas as pd
import numpy as np
x=np.array([4,6])
y=np.array([3,9])
plt.plot(x,y)
plt.show()
```



Line plot

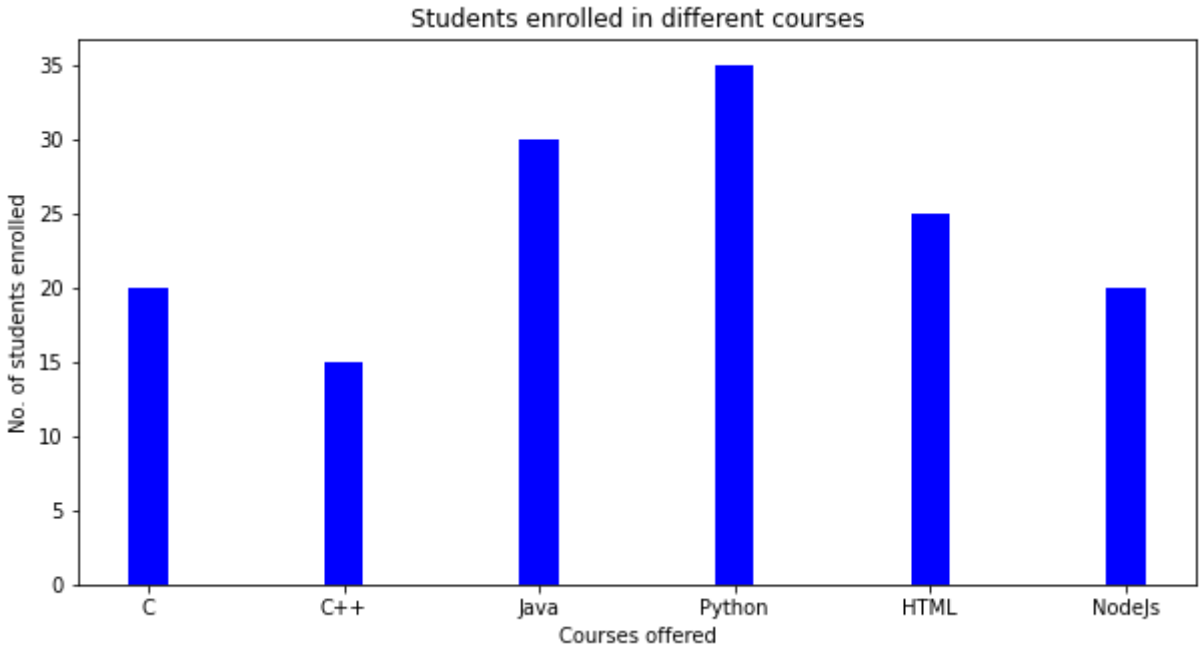
```
x=np.array([5,6,7,8])
y=np.array([5,3,2,7])
plt.plot(x,y)
plt.show()
```



Bar Chart

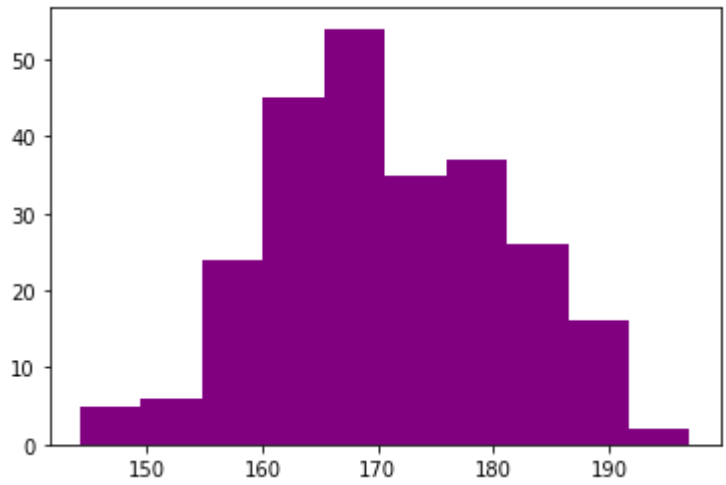
```
data = {'C':20, 'C++':15, 'Java':30,
```

```
        'Python':35,'HTML':25,'NodeJs':20}
courses = list(data.keys())
values = list(data.values())
fig = plt.figure(figsize = (10, 5))
plt.bar(courses, values, color ='blue',width = 0.2)
plt.xlabel("Courses offered")
plt.ylabel("No. of students enrolled")
plt.title("Students enrolled in different courses")
plt.show()
```



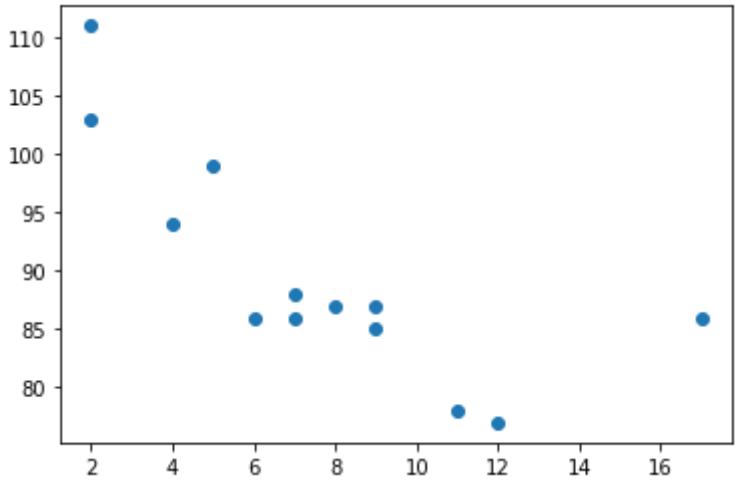
Histogram

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



Scatter Plot

```
import matplotlib.pyplot as plt
import numpy as np
x = np.array([5,7,8,7,2,17,2,9,4,11,12,9,6])
y = np.array([99,86,87,88,111,86,103,87,94,78,77,85,86])
plt.scatter(x, y)
plt.show()
```



Pie Chart

```
import matplotlib.pyplot as plt
import numpy as np
y = np.array([10, 16, 9, 25, 20, 20])
mylabels = ["kia", "Hyundai", "Honda", "Maruti","Mahindra","Tata"]
plt.pie(y, labels = mylabels)
plt.show()
```