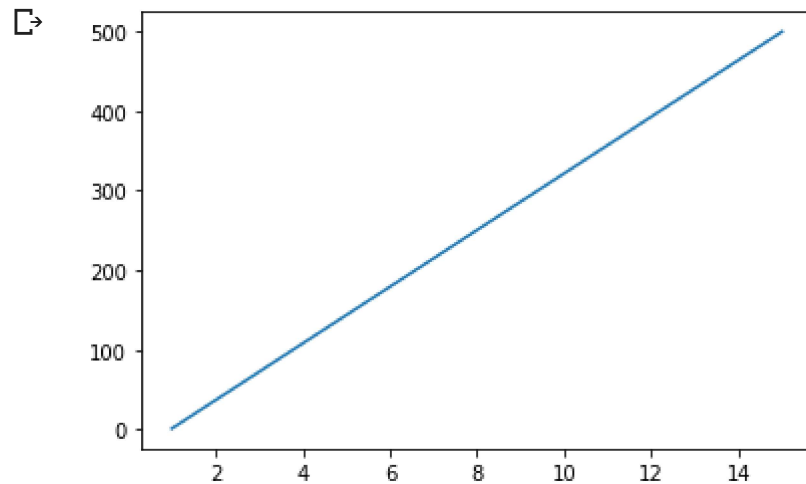


```
import matplotlib.pyplot as plt
import numpy as np
```

```
xpoints = np.array([1, 15])
ypoints = np.array([1, 500])
```

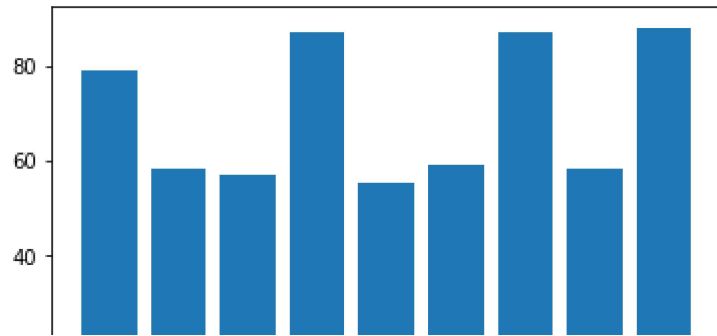
```
plt.plot(xpoints, ypoints)
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np
```

```
x = np.array(["CLAD", "IT", "C", "ENG", "MATHS1", "MATHS2", "WS", "PHY", "VEDC"])
y = np.array([79, 58, 57, 87, 55, 59, 87, 58, 88])
```

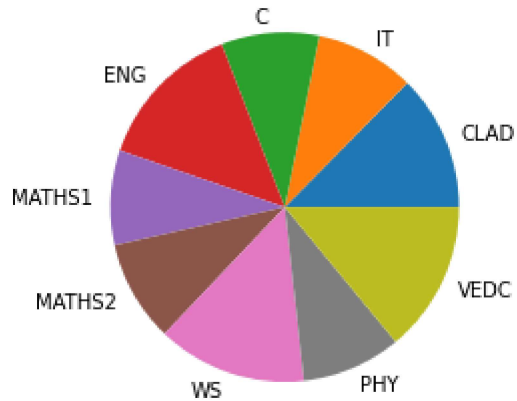
```
plt.bar(x,y)
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np
```

```
y = np.array([79, 58, 57, 87, 55, 59, 87, 58, 88])
mylables = (["CLAD", "IT", "C", "ENG", "MATHS1", "MATHS2", "WS", "PHY", "VEDC"])
```

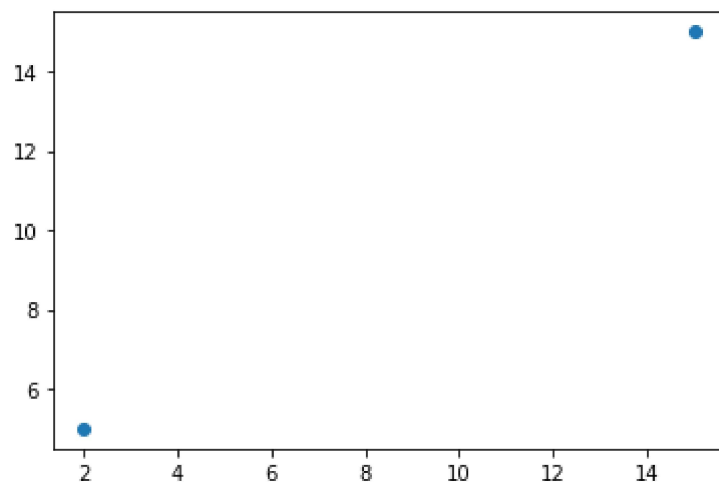
```
plt.pie(y, labels = mylables)
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np
```

```
xpoints = np.array ([2,15])
ypoints = np.array ([5,15])
```

```
plt.plot(xpoints, ypoints, 'o')  
plt.show()
```



```
import matplotlib.pyplot as plt  
import numpy as np
```

```
xpoints = np.array([1,3,5,9])  
ypoints = np.array([2,7,4,10])
```

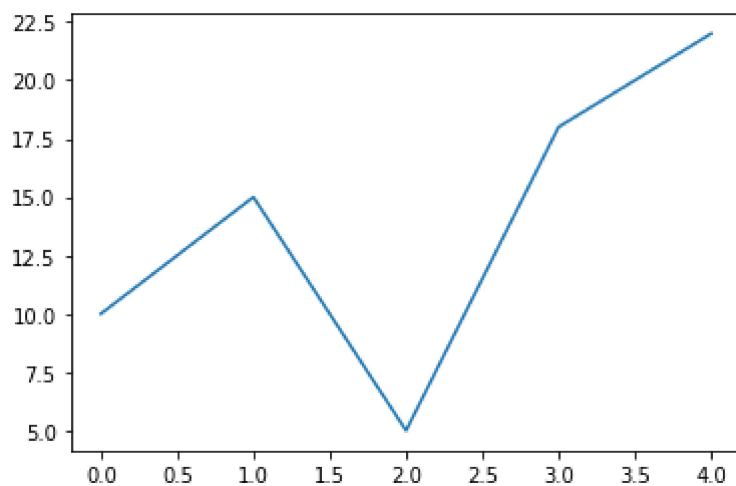
```
plt.plot(xpoints,ypoints)  
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np
```

```
ypoints = np.array([10,15,5,18,22])
```

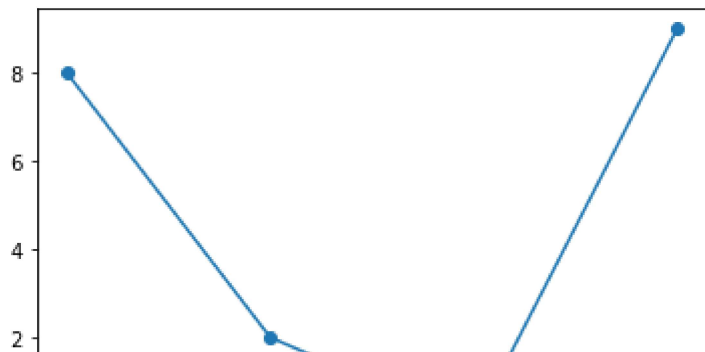
```
plt.plot(ypoints)
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np
```

```
ypoints = np.array([8,2,0,9])
```

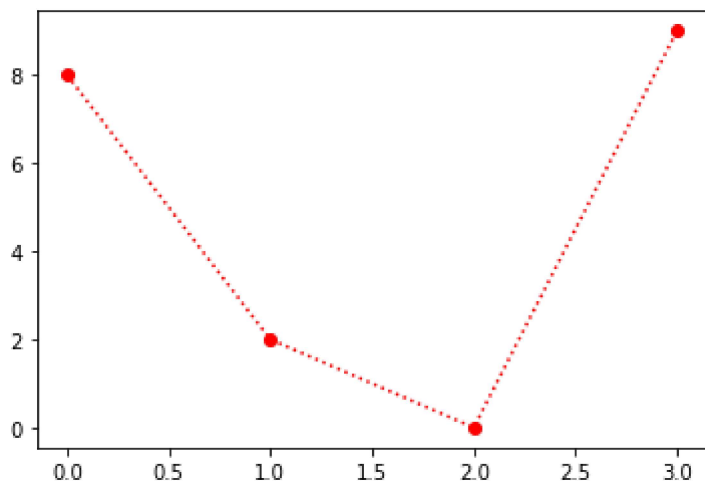
```
plt.plot(ypoints, marker = 'o')
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np
```

```
ypoints = np.array([8,2,0,9])
```

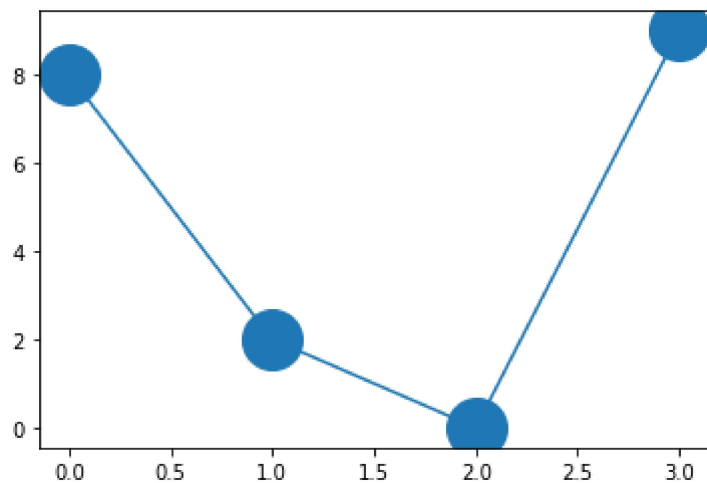
```
plt.plot(ypoints, 'o:r')
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np
```

```
ypoints = np.array([8,2,0,9])
```

```
plt.plot(ypoints, marker = 'o',ms = 30)  
plt.show()
```

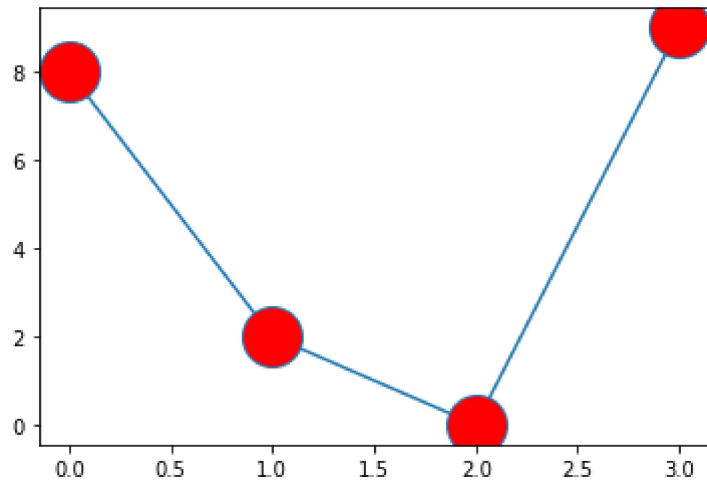


```
import matplotlib.pyplot as plt  
import numpy as np  
  
ypoints = np.array([8,2,0,9])  
  
plt.plot(ypoints, marker = 'o', ms = 30 , mec= 'r')  
plt.show()
```

```
import matplotlib.pyplot as plt
import numpy as np

ypoints = np.array([8,2,0,9])

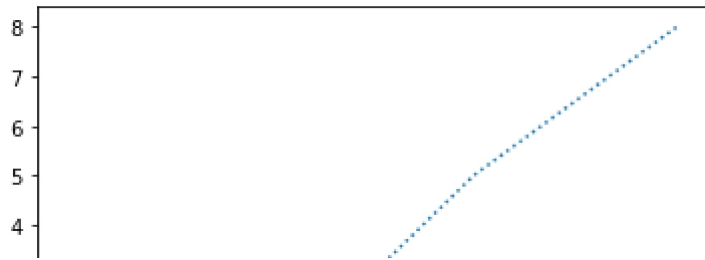
plt.plot(ypoints, marker = 'o', ms = 30 , mfc= 'r')
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np

ypoints = np.array([0,1,5,8])

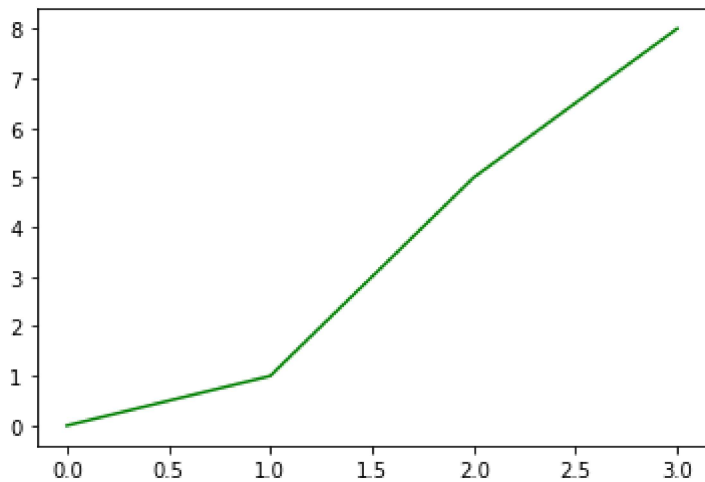
plt.plot(ypoints, linestyle = 'dotted')
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np
```

```
ypoints = np.array([0,1,5,8])
```

```
plt.plot(ypoints, color = 'g')
plt.show()
```

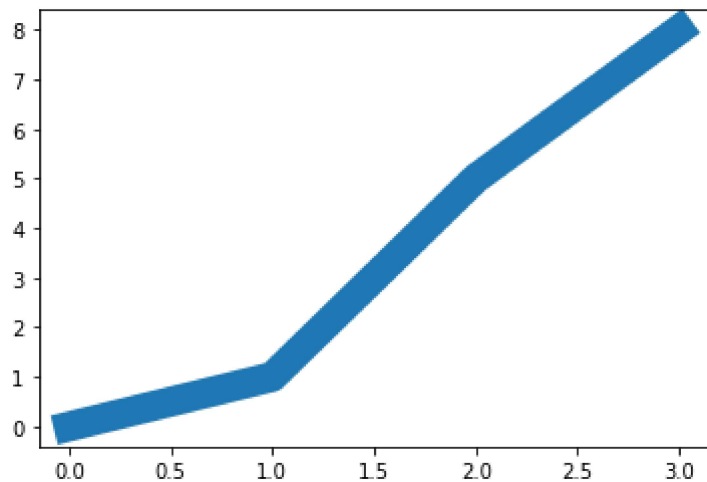


```
import matplotlib.pyplot as plt
import numpy as np
```

```
ypoints = np.array([0,1,5,8])
```

```
plt.plot(ypoints, linewidth = 15)
plt.show()
```



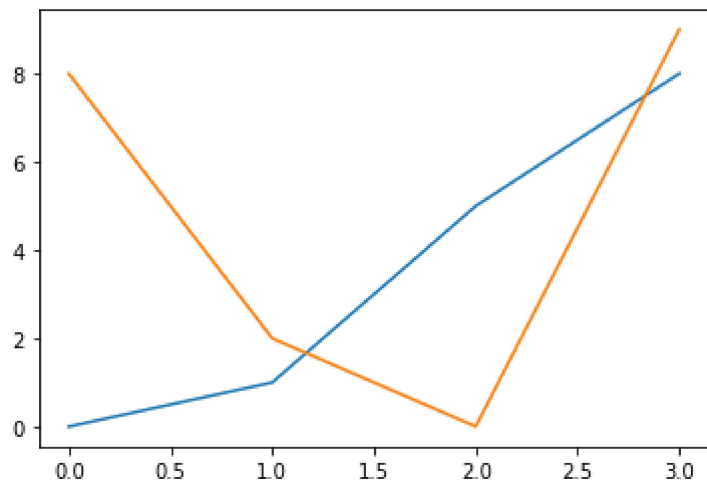


```
import matplotlib.pyplot as plt
import numpy as np
```

```
y1 = np.array([0,1,5,8])
y2 = np.array([8,2,0,9])
```

```
plt.plot(y1)
plt.plot(y2)
```

```
plt.show()
```



```
import numpy as np
import matplotlib.pyplot as plt

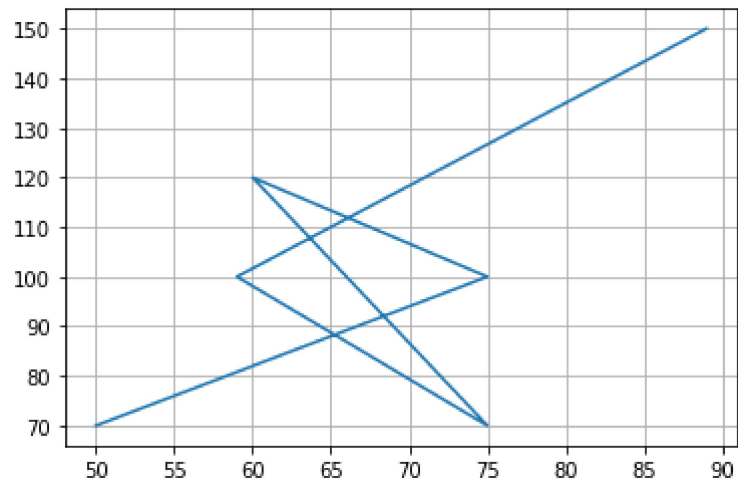
x= np.array([50,75,60,75,59,89,])
y= np.array([70,100,120,70,100,150])

plt.title("semister marks")
plt.xlabel("subject marks")
plt.ylabel("total marks")

plt.plot(x, y)

plt.grid()

plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np

#plot 1:
```

```
x = np.array([0, 1, 5, 8])
y = np.array([8, 2, 0, 9])
```

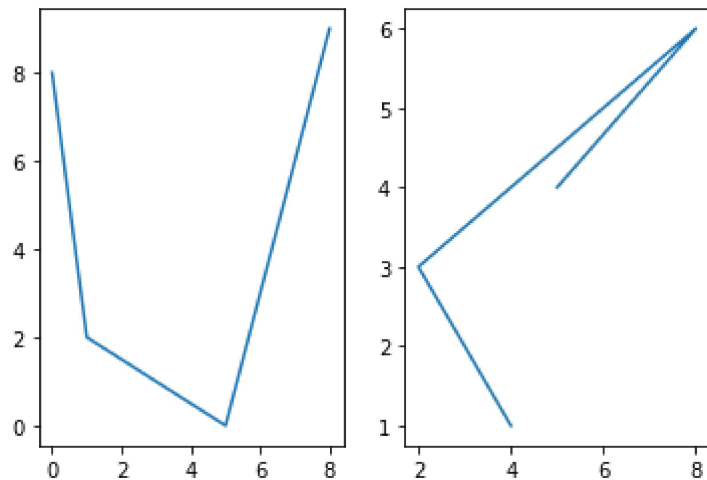
```
plt.subplot(1, 2, 1)
plt.plot(x,y)
```

```
#plot 2:
```

```
x = np.array([4, 2, 8, 5])
y = np.array([1, 3, 6, 4])
```

```
plt.subplot(1, 2, 2)
plt.plot(x,y)
```

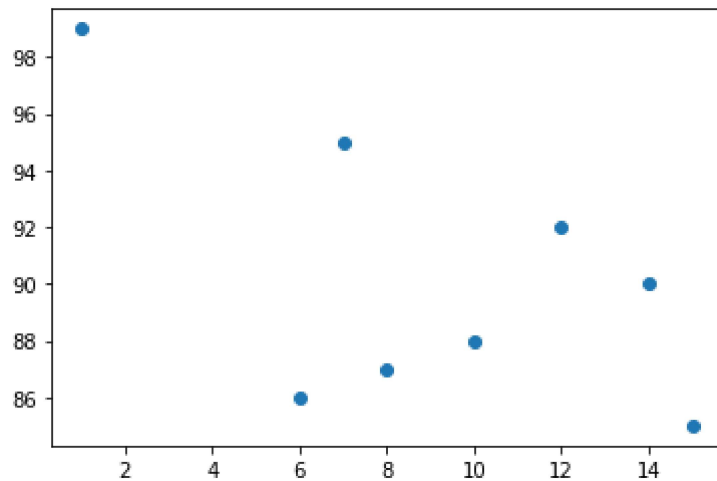
```
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np
```

```
x = np.array([1,6,8,10,15,14,7,12])
y = np.array([99,86,87,88,85,90,95,92])
```

```
plt.scatter(x, y)
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np
```

```
x = np.array([1,6,8,10,15,14,7,12])
y = np.array([99,86,87,88,85,90,92,91])
plt.scatter(x, y, color = 'gray')
```

```
x = np.array([4,8,10,5,15,20,11,7])
y = np.array([84,99,90,95,94,91,80,85])
plt.scatter(x, y, color = 'yellow')
```

```
plt.scatter(x, y)
plt.show()
```

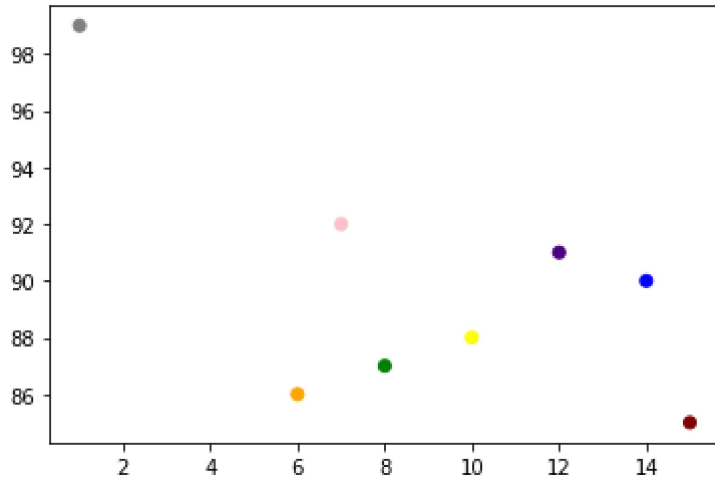


```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([1,6,8,10,15,14,7,12])
y = np.array([99,86,87,88,85,90,92,91])
colors = np.array(["gray", "orange", "green", "yellow", "maroon", "blue", "pink", "indigo"])

plt.scatter(x, y, c=colors)

plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np

x = np.array([0, 1, 5, 8])
y = np.array([8, 2, 0, 9])

plt.subplot(1, 2, 1)
plt.plot(x,y)
```

```
x = np.array([4, 2, 8, 5])  
y = np.array([1, 3, 6, 4])
```

```
plt.subplot(1, 2, 2)  
plt.plot(x,y)
```

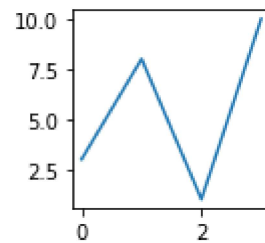
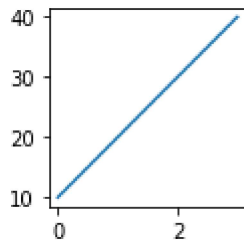
```
x = np.array([0, 1, 2, 3])  
y = np.array([3, 8, 1, 10])
```

```
plt.subplot(2, 3, 3)  
plt.plot(x,y)
```

```
x = np.array([0, 1, 2, 3])  
y = np.array([10, 20, 30, 40])
```

```
plt.subplot(2, 3, 4)  
plt.plot(x,y)
```

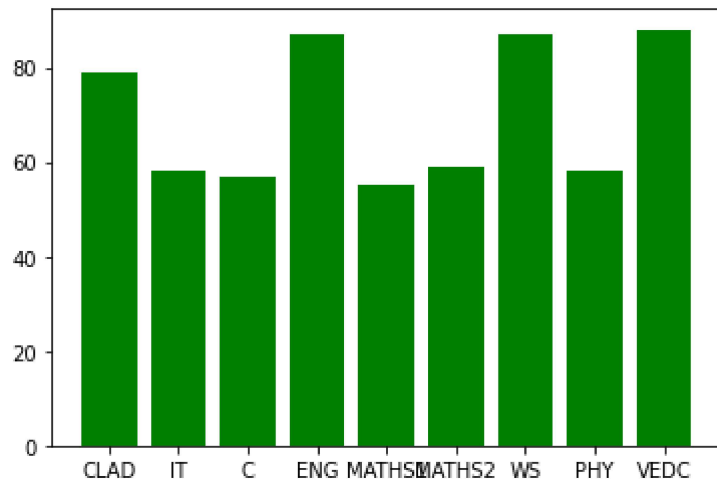
```
plt.show()
```



```
import matplotlib.pyplot as plt  
import numpy as np
```

```
x = np.array(["CLAD", "IT", "C", "ENG", "MATHS1", "MATHS2", "WS", "PHY", "VEDC"])
y = np.array([79, 58, 57, 87, 55, 59, 87, 58, 88])

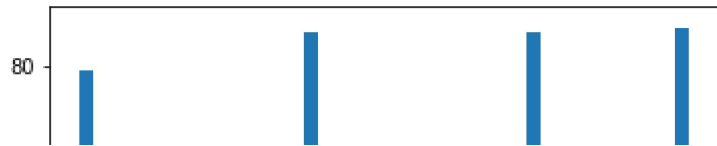
plt.bar(x, y, color = "green")
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np

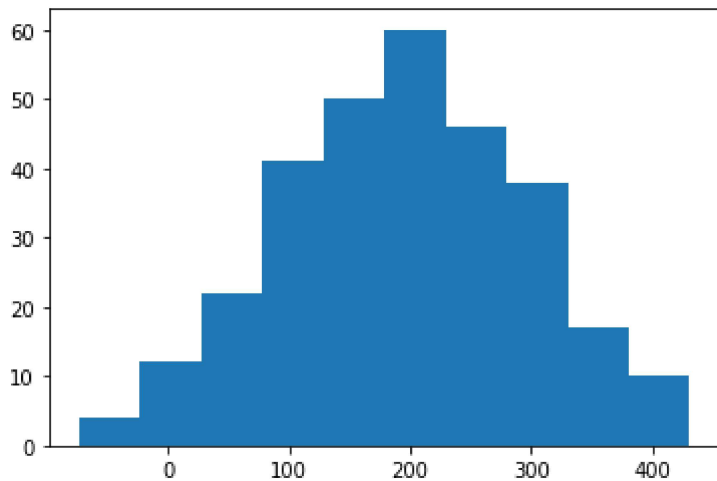
x = np.array(["CLAD", "IT", "C", "ENG", "MATHS1", "MATHS2", "WS", "PHY", "VEDC"])
y = np.array([79, 58, 57, 87, 55, 59, 87, 58, 88])

plt.bar(x, y, width = 0.19)
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np
```

```
x=np.random.normal(200, 100, 300)
plt.hist(x)
plt.show()
```

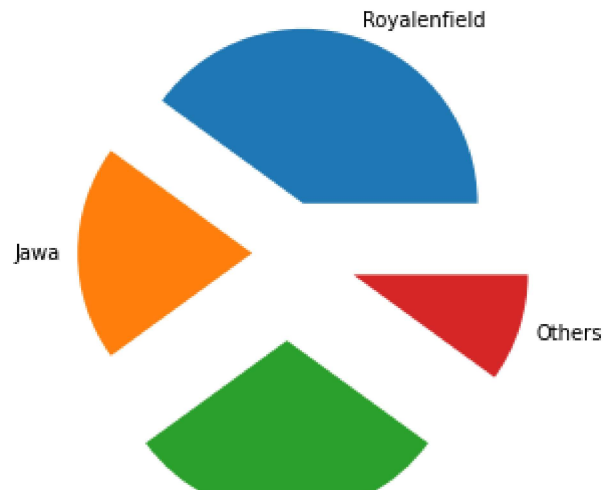


```
import matplotlib.pyplot as plt
import numpy as np
```

```
y = np.array([40,20,30,10])
mylables = (["Royalenfield", "Jawa", "Duke", "Others"])
myexplode=([0.3,0.2,0.5,0.4])
```

```
plt.pie(y, labels = mylables, explode= myexplode)
plt.show()
```

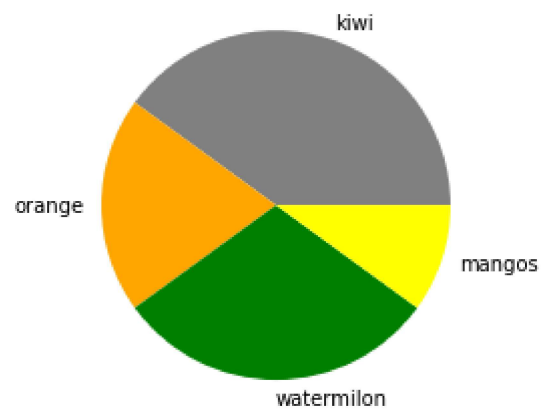




```
import matplotlib.pyplot as plt
import numpy as np

y = np.array([40,20,30,10])
mylables = (["Royalenfield", "Jawa", "Duke", "Others"])
mycolors = ["gray", "orange", "green", "yellow"]

plt.pie(y, labels = mylables, colors = mycolors)
plt.show()
```



```
import numpy as np
```

```
import matplotlib.pyplot as plt

x = np.array(["CLAD", "IT", "C", "ENG", "MATHS1", "MATHS2", "WS", "PHY", "VEDC"])
y = np.array([79, 58, 57, 87, 55, 59, 87, 58, 88])

plt.title("semester marks")
plt.xlabel("subjects")
plt.ylabel("marks")

plt.plot(x, y)

plt.grid()

plt.show()
```

