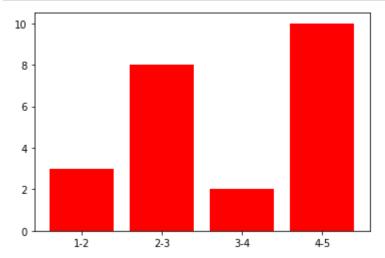
In []: | #Matplotlib Bars

```
In [20]: import matplotlib.pyplot as plt
import numpy as np

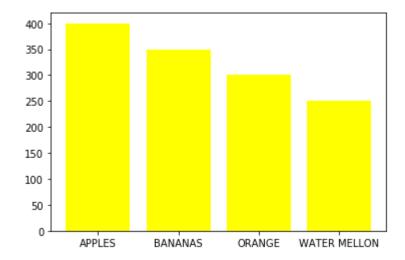
x = np.array(["1-2", "2-3", "3-4", "4-5"])
y = np.array([3, 8, 2, 10])

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



```
In [19]: x = ["APPLES", "BANANAS", "ORANGE", "WATER MELLON"]
y = [400, 350,300,250]
plt.bar(x, y, color = "YELLOW")
```

Out[19]: <BarContainer object of 4 artists>

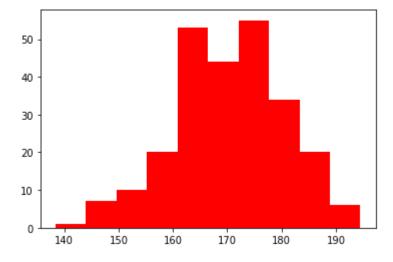


In []: # Matplotlib Histograms

```
In [22]: import matplotlib.pyplot as plt
import numpy as np

x = np.random.normal(170, 10, 250)

plt.hist(x ,color="red")
plt.show()
```



```
In [23]: import matplotlib.pyplot as plt
import numpy as np

y = np.array([35, 25, 25, 15])

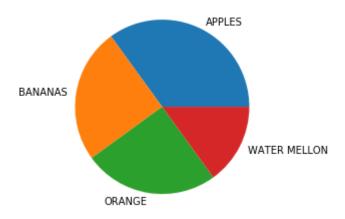
plt.pie(y)
plt.show()
```



```
In [37]: import matplotlib.pyplot as plt
import numpy as np

y = np.array([35, 25, 25, 15])
mylabels = ["APPLES", "BANANAS", "ORANGE", "WATER MELLON"]

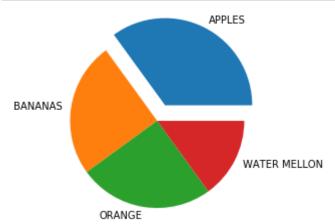
plt.pie(y, labels = mylabels)
plt.show()
```



```
In [38]: import matplotlib.pyplot as plt
import numpy as np

y = np.array([35, 25, 25, 15])
mylabels = ["APPLES", "BANANAS","ORANGE","WATER MELLON"]
myexplode = [0.2, 0, 0, 0]

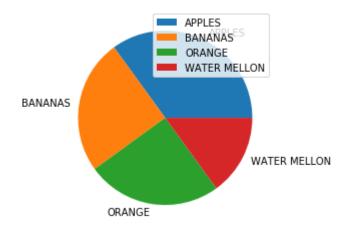
plt.pie(y, labels = mylabels, explode = myexplode)
plt.show()
```



```
In [39]: import matplotlib.pyplot as plt
import numpy as np

y = np.array([35, 25, 25, 15])
mylabels = ["APPLES", "BANANAS", "ORANGE", "WATER MELLON"]

plt.pie(y, labels = mylabels)
plt.legend()
plt.show()
```

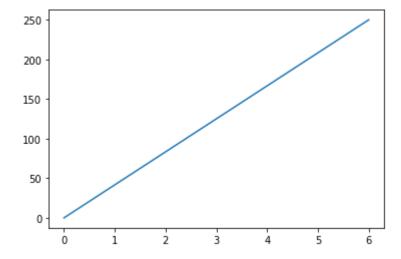


In []: #Matplotlib Pyplot

```
In [28]: import matplotlib.pyplot as plt
import numpy as np

xpoints = np.array([0, 6])
ypoints = np.array([0, 250])

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

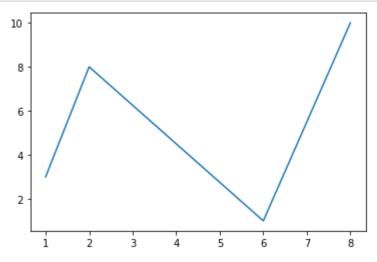


```
In [ ]: #Multiple Points
```

```
In [29]: import matplotlib.pyplot as plt
import numpy as np

xpoints = np.array([1, 2, 6, 8])
ypoints = np.array([3, 8, 1, 10])

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

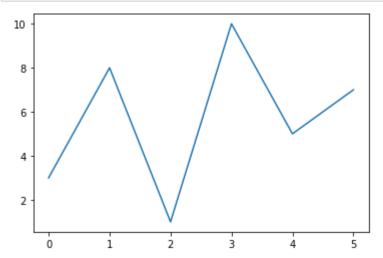


```
In [ ]:
```

```
In [30]: import matplotlib.pyplot as plt
import numpy as np

ypoints = np.array([3, 8, 1, 10, 5, 7])

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



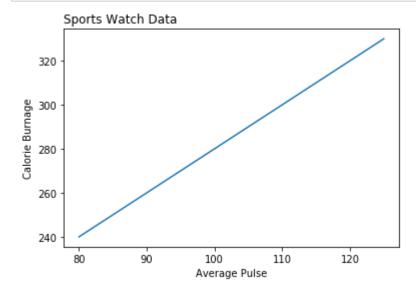
```
In [31]:
          import matplotlib.pyplot as plt
          import numpy as np
          ypoints = np.array([3, 8, 1, 10])
          plt.plot(ypoints, marker = 'o')
          plt.show()
           10
            8
            6
            4
            2
                                    1.5
               0.0
                      0.5
                             1.0
                                            2.0
                                                   2.5
                                                          3.0
In [ ]:
In [32]:
          import matplotlib.pyplot as plt
          import numpy as np
          ypoints = np.array([3, 8, 1, 10])
          plt.plot(ypoints, linestyle = 'dotted')
          plt.show()
           10
            8
            2
                      0.5
                             1.0
                                    1.5
                                            2.0
                                                   2.5
                                                          3.0
               0.0
In [ ]:
```

```
In [33]: import numpy as np
import matplotlib.pyplot as plt

x = np.array([80, 85, 90, 95, 100, 105, 110, 115, 120, 125])
y = np.array([240, 250, 260, 270, 280, 290, 300, 310, 320, 330])

plt.title("Sports Watch Data", loc = 'left')
plt.xlabel("Average Pulse")
plt.ylabel("Calorie Burnage")

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



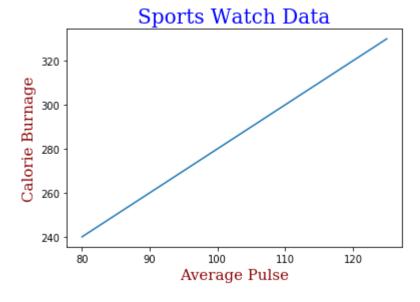
```
In [34]: import numpy as np
    import matplotlib.pyplot as plt

x = np.array([80, 85, 90, 95, 100, 105, 110, 115, 120, 125])
y = np.array([240, 250, 260, 270, 280, 290, 300, 310, 320, 330])

font1 = {'family':'serif','color':'blue','size':20}
    font2 = {'family':'serif','color':'darkred','size':15}

plt.title("Sports Watch Data", fontdict = font1)
    plt.xlabel("Average Pulse", fontdict = font2)
    plt.ylabel("Calorie Burnage", fontdict = font2)

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



In []:

```
In [35]: import numpy as np
import matplotlib.pyplot as plt

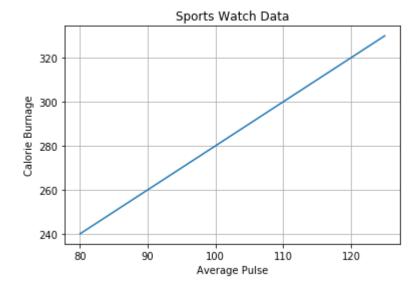
x = np.array([80, 85, 90, 95, 100, 105, 110, 115, 120, 125])
y = np.array([240, 250, 260, 270, 280, 290, 300, 310, 320, 330])

plt.title("Sports Watch Data")
plt.xlabel("Average Pulse")
plt.ylabel("Calorie Burnage")

plt.plot(x, y)

plt.grid()

plt.show()
```



In []:

```
In [36]: import numpy as np
    import matplotlib.pyplot as plt

x = np.array([80, 85, 90, 95, 100, 105, 110, 115, 120, 125])
y = np.array([240, 250, 260, 270, 280, 290, 300, 310, 320, 330])

plt.title("Sports Watch Data")
plt.xlabel("Average Pulse")
plt.ylabel("Calorie Burnage")

plt.plot(x, y)

plt.grid(color = 'green', linestyle = '--', linewidth = 0.5)

plt.show()
```

