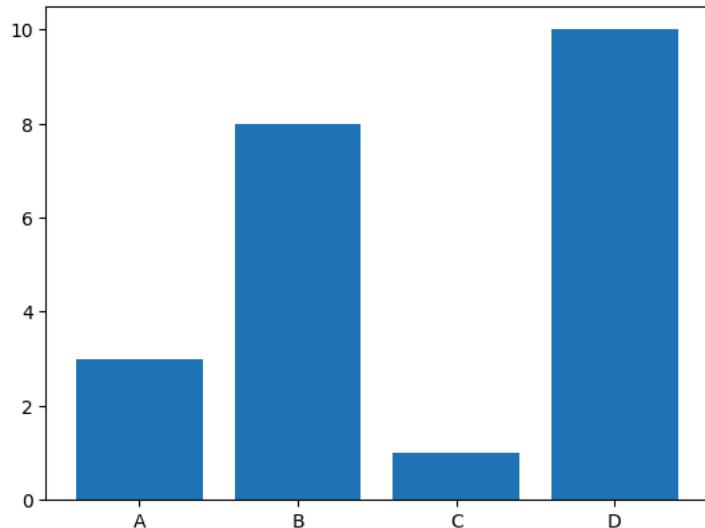


```
import matplotlib.pyplot as plt
import numpy as np

x = np.array(["A", "B", "C", "D"])
y = np.array([3, 8, 1, 10])

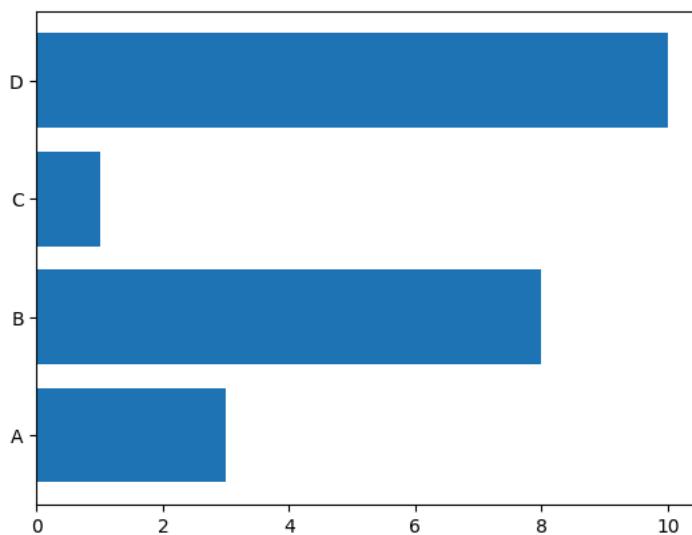
plt.bar(x,y)
plt.show()
```



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

x = np.array(["A", "B", "C", "D"])
y = np.array([3, 8, 1, 10])

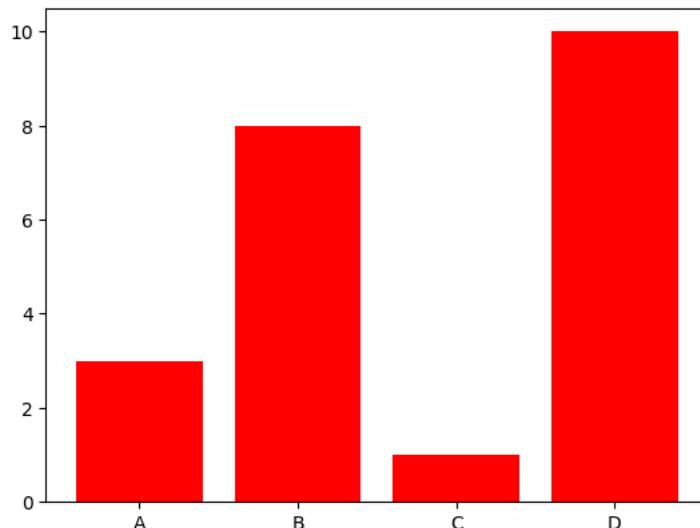
plt.barh(x, y)
plt.show()
```



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

x = np.array(["A", "B", "C", "D"])
y = np.array([3, 8, 1, 10])

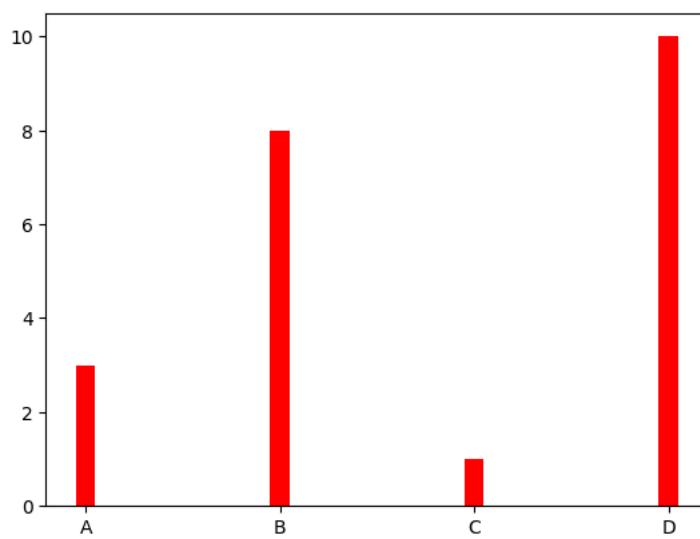
plt.bar(x, y, color = "red")
plt.show()
```



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

x = np.array(["A", "B", "C", "D"])
y = np.array([3, 8, 1, 10])

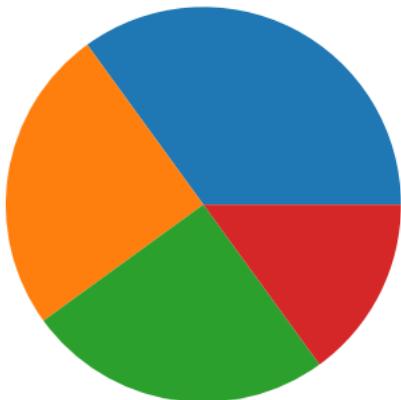
plt.bar(x, y, width = 0.1, color='r')
plt.show()
```



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

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

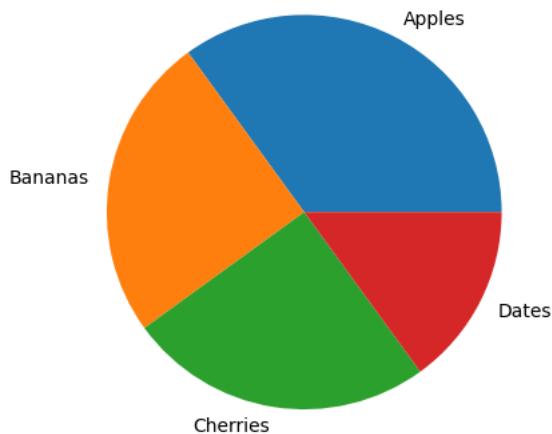
plt.pie(y)
plt.show()
```



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

y = np.array([35, 25, 25, 15])
mylabels = ["Apples", "Bananas", "Cherries", "Dates"]

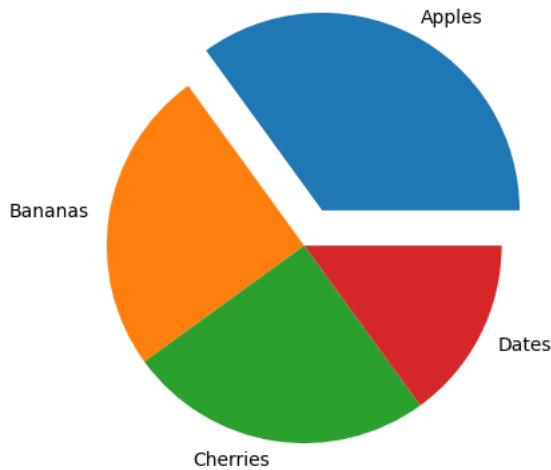
plt.pie(y, labels = mylabels)
plt.show()
```



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

y = np.array([35, 25, 25, 15])
mylabels = ["Apples", "Bananas", "Cherries", "Dates"]
myexplode = [0.2, 0, 0, 0]

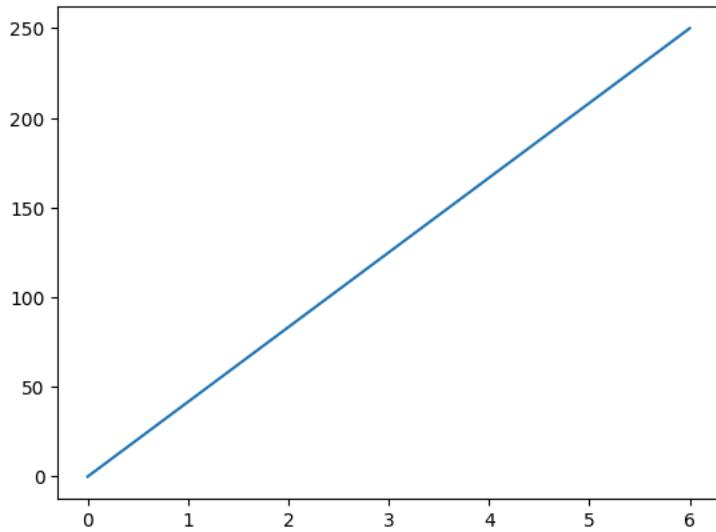
plt.pie(y, labels = mylabels, explode = myexplode)
plt.show()
```



```
import matplotlib.pyplot as plt # visualizations
import numpy as np # numerical python

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

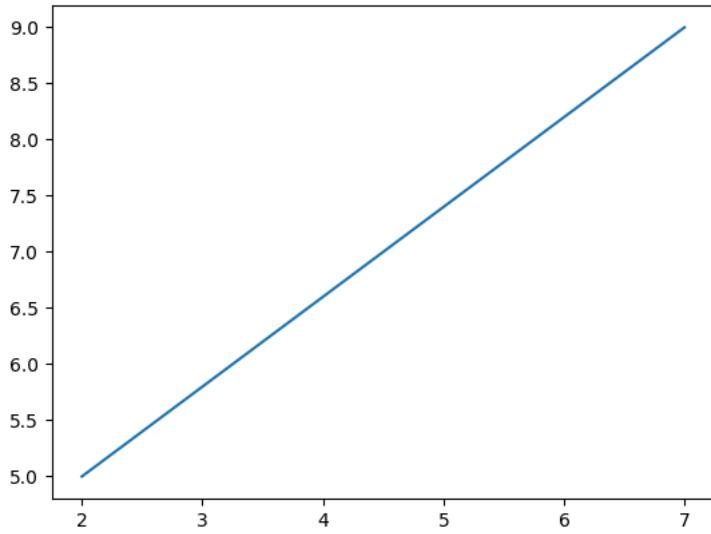
plt.plot(xpoints, ypoints)
plt.show()
```



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

xpoints = np.array([2, 7])
ypoints = np.array([5, 9])

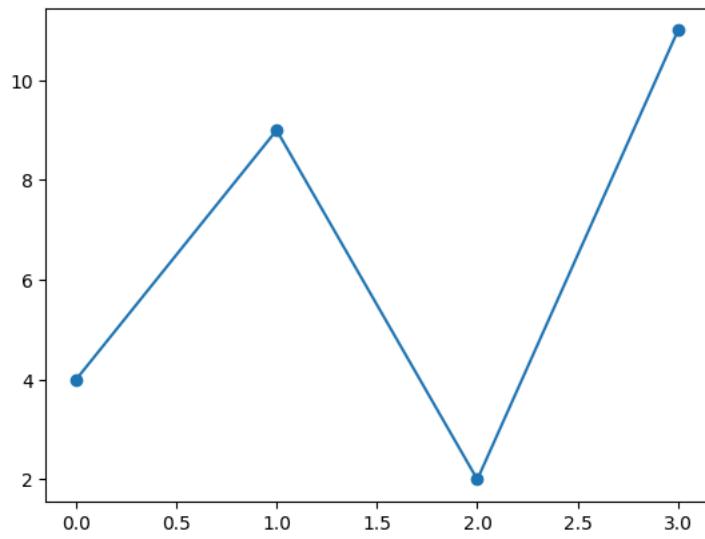
plt.plot(xpoints, ypoints)
plt.show()
```



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

ypoints = np.array([4, 9, 2, 11])

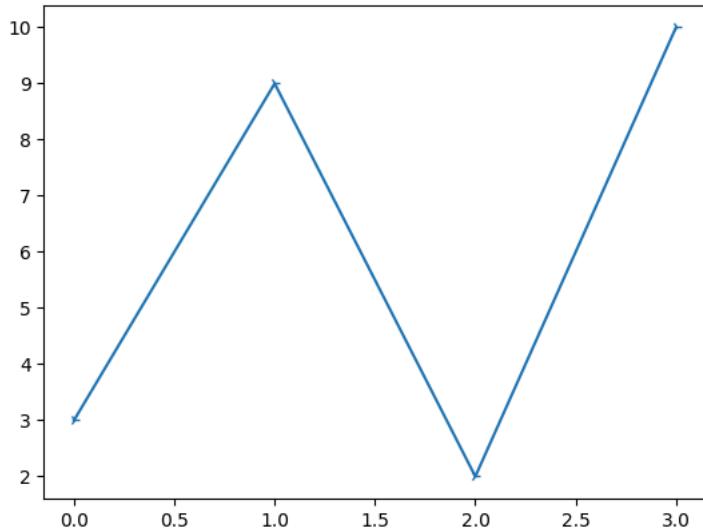
plt.plot(ypoints, marker = 'o')
plt.show()
```



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

ypoints = np.array([3, 9, 2, 10])

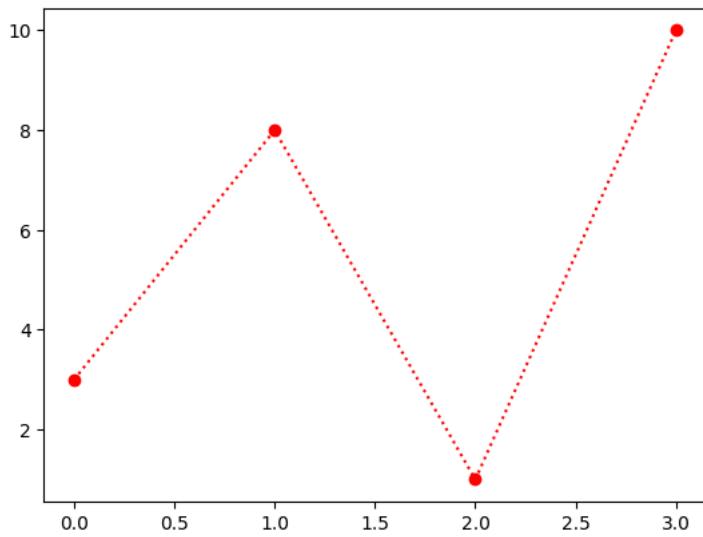
plt.plot(ypoints, marker = '4')
plt.show()
```



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

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

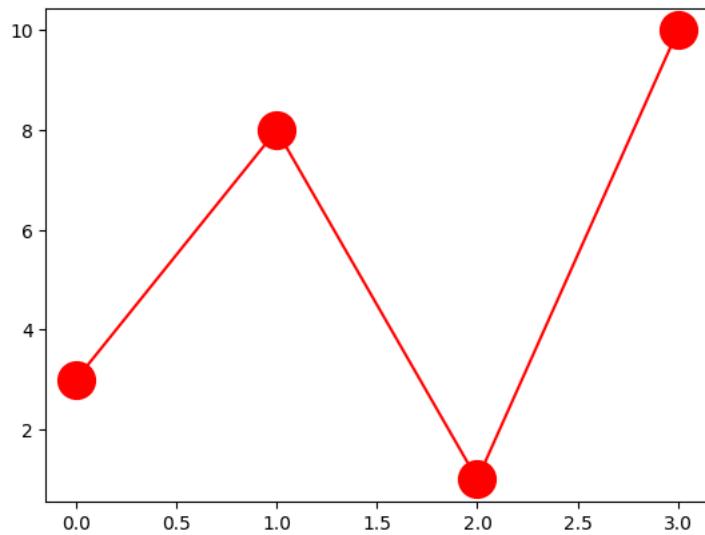
plt.plot(ypoints, 'o:r')
plt.show()
```



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

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

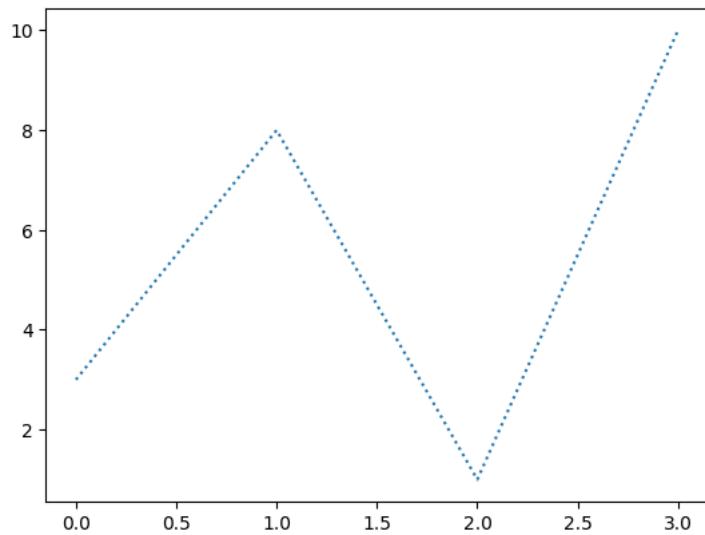
plt.plot(ypoints, marker = 'o', ms = 20, color='red')
plt.show()
```



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

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

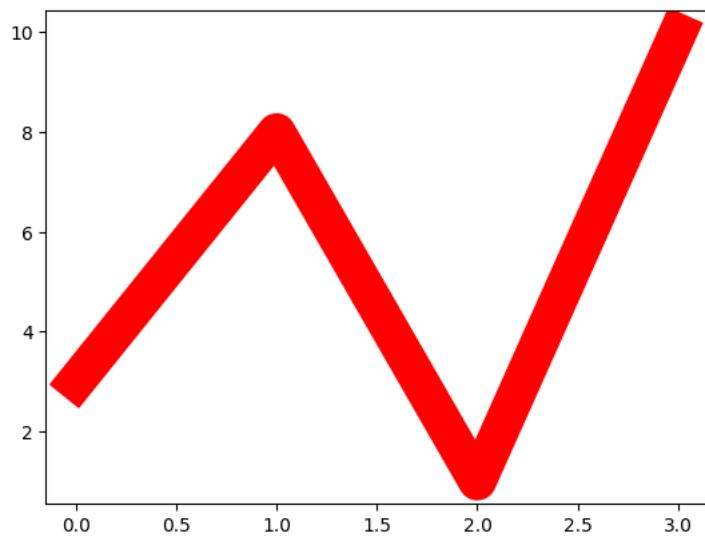
plt.plot(ypoints, linestyle = 'dotted')
plt.show()
```



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

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

plt.plot(ypoints, linewidth = '20.5', color='r')
plt.show()
```

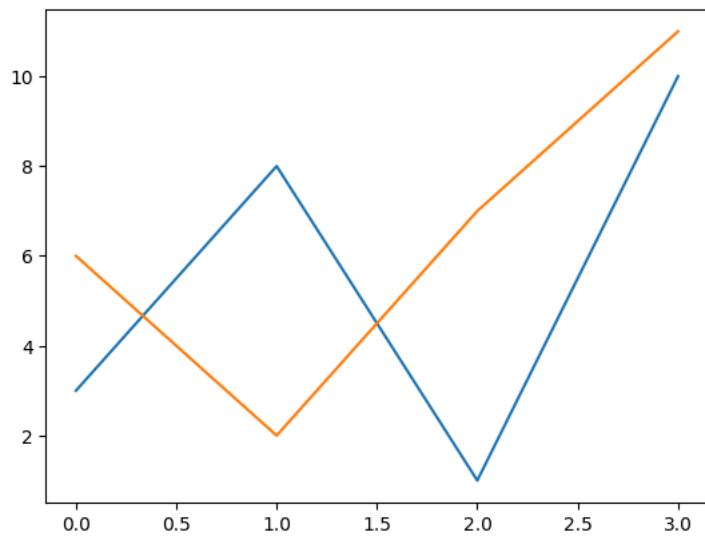


```
import matplotlib.pyplot as plt
import numpy as np

y1 = np.array([3, 8, 1, 10])
y2 = np.array([6, 2, 7, 11])

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

plt.show()
```



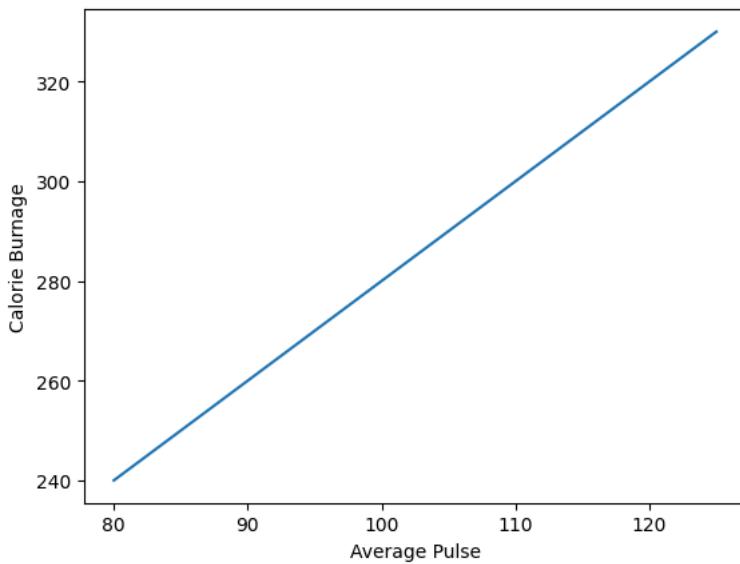
```
import numpy as np
import matplotlib.pyplot as plt

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.plot(x, y)

plt.xlabel("Average Pulse")
plt.ylabel("Calorie Burnage")

plt.show()
```



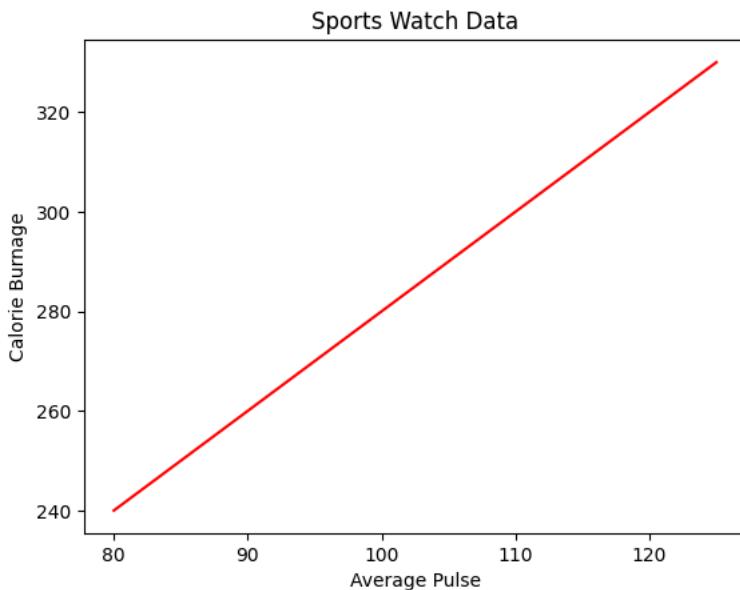
```
import numpy as np
import matplotlib.pyplot as plt

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.plot(x, y, color='r')

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

plt.show()
```



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

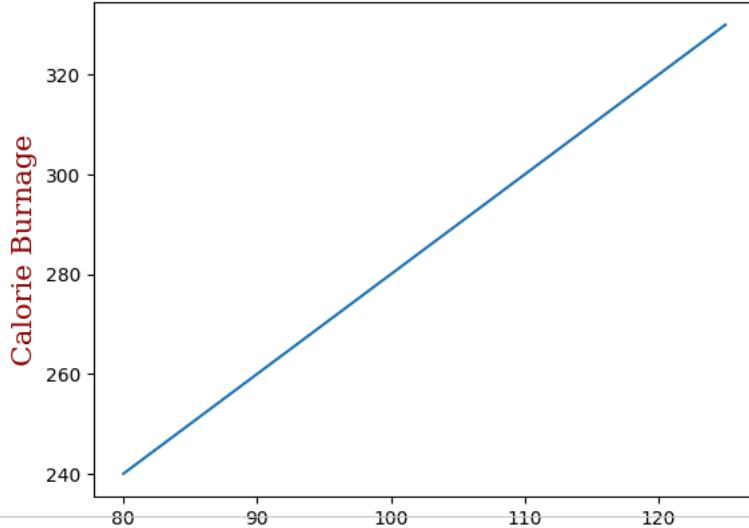
x = np.array([80, 85, 90, 95, 100, 105, 110, 115, 120, 125])
y = np.array([240, 250, 260, 270, 280, 290, 300, 310, 320, 330])

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()
```

Sports Watch Data



```
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)
```