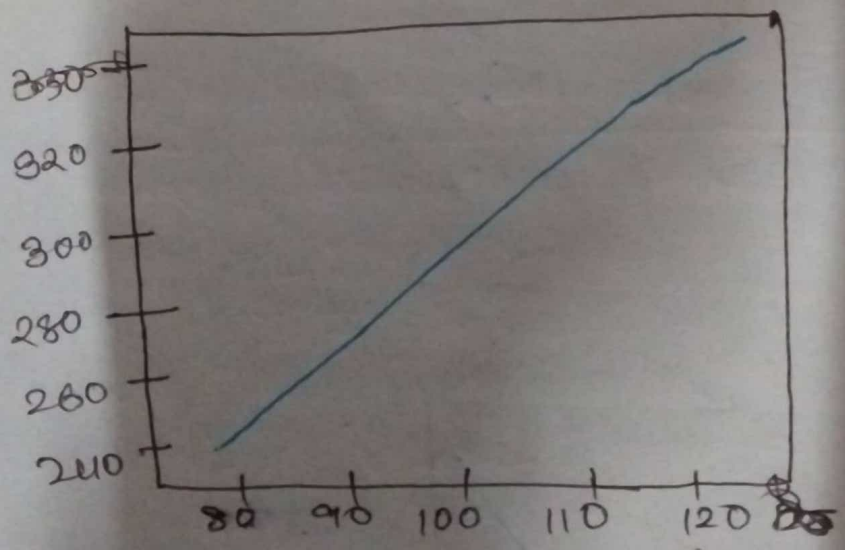
Matplotlib Labels and Title

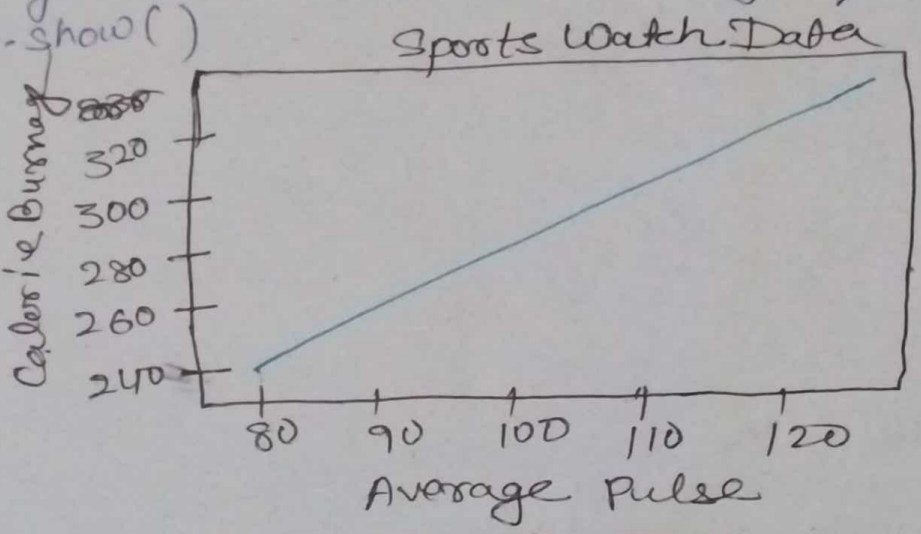
```
x = y
x = np.array([80,85,90,95,100,105,110,115,120,125])
y = np.array([240,250,260,270,280,290,300,310,320,330])
plt.plot(x,y)
plt.xlabel("Average Pulse")
plt.ylabel("Calorie Burnage")
plt.show()
```



Create a Title for a Plot

title() function to set a title for the plot

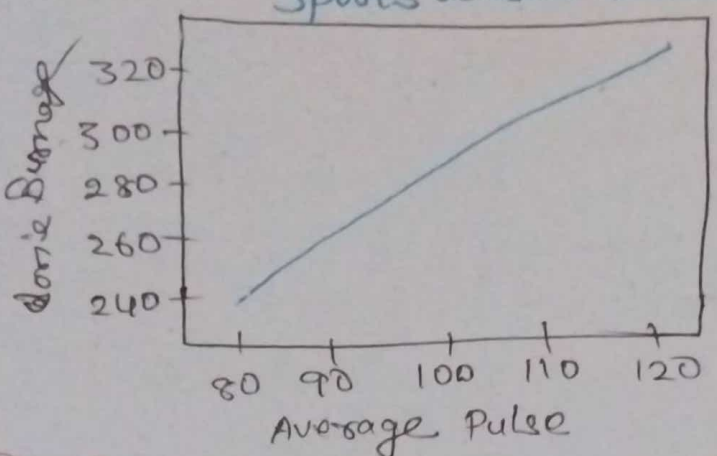
```
x = np.array([80,85,90,95,100,105,110,115,120,125])
y = np.array([240,250,260,270,280,290,300,310,320,
              330])
plt.plot(x,y)
plt.title("Sports Watch Data")
plt.xlabel("Average Pulse")
plt.ylabel("Calorie Burnage")
plt.show()
```



Set Font Properties for Title and Labels

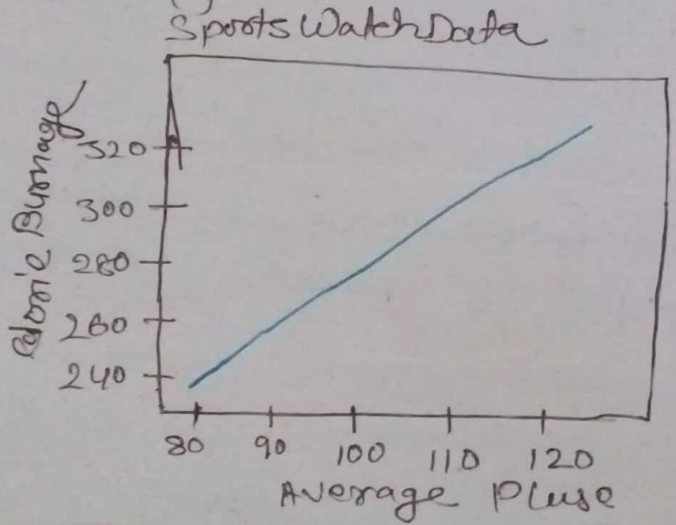
We can use the fontdict parameter in xlabel(), ylabel(), and title() to set font properties for the title and labels.

```
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()
```



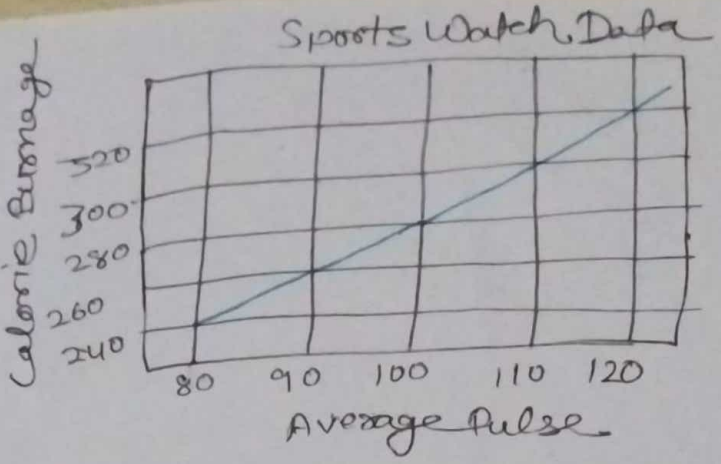
Position the Title

```
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()
```



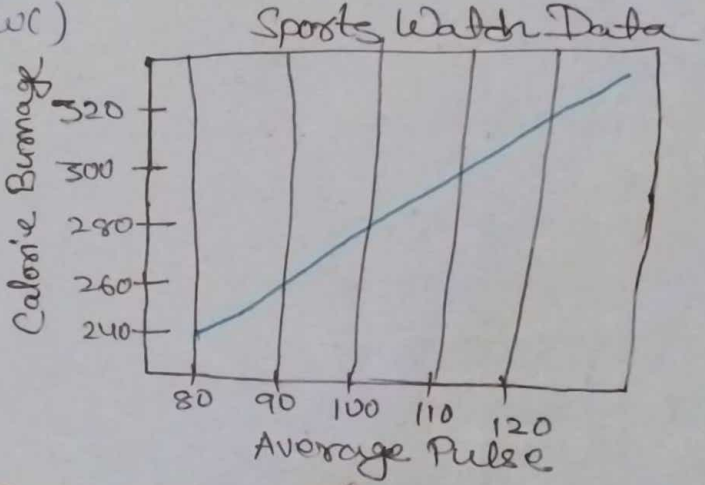
Matplotlib Adding Grid Lines

```
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()
```



Display only grid lines ~~for~~ the x-axis.

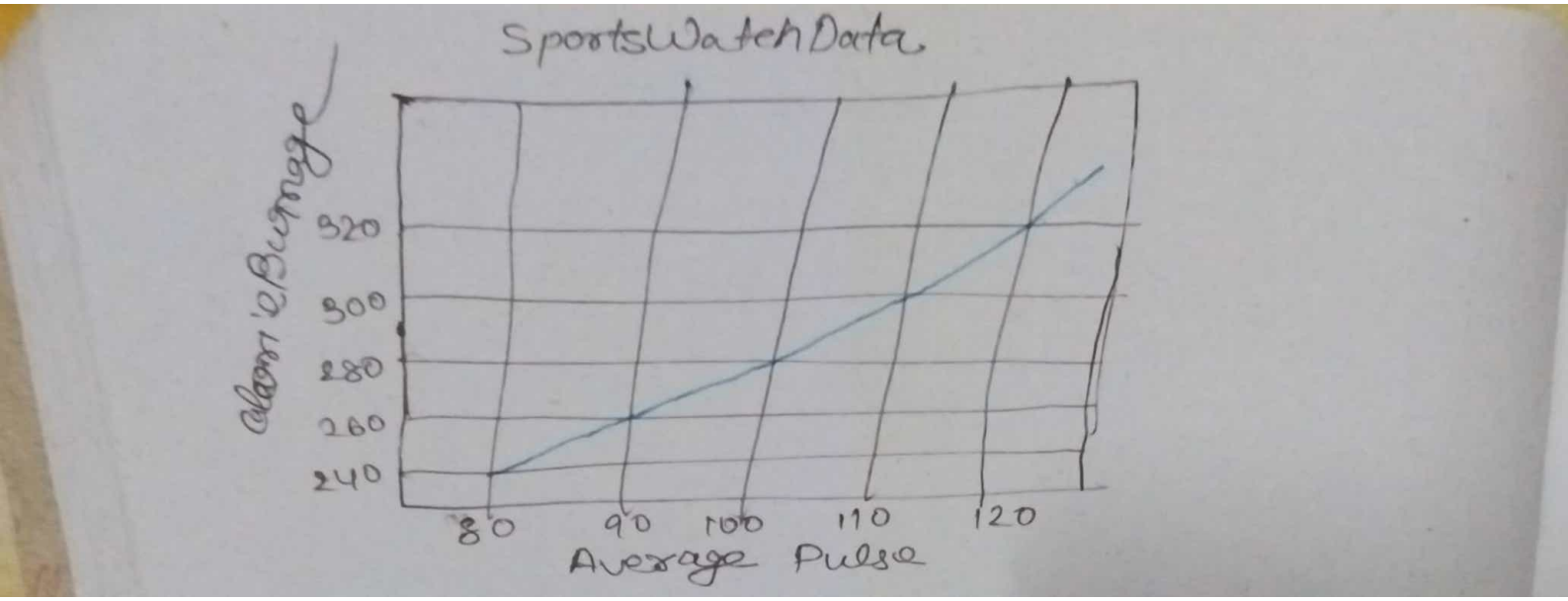
```
x = np.array([80, 85, 90, 95, 100, 105, 110, 115, 120, 125])
y = np.array([240, 250, 260, 270, 280, 290, 300, 310, 320, 330])
plt.title("Sports Watch Data")
plt.xlabel("Average Pulse")
plt.plot(x, y)
plt.grid(axis='x')
plt.show()
```



Properties of grid

We can also set the line properties of the grid, like this: grid(color='color', linestyle', linewidth=number).

```
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()
```


SportsWatchData
Calories Burnage
320
300
280
260
240
80
90
100
110
120
Average Pulse