

How can I change the font sizes on a Matplotlib plot?

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PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=136858>

Changing the font sizes on a Matplotlib plot is a simple process that allows users to customize the text appearance on their graphs and charts. This can be done by using the "plt.rcParams" function to adjust the default font sizes for the title, axis labels, and tick labels. Additionally, users can also specify individual font sizes for each element by using the "fontsize" parameter in the respective functions. This feature allows for greater flexibility and control in creating visually appealing and easy-to-read plots.

Change Font Sizes on a Matplotlib Plot

Often you may want to change the font sizes of various elements on a Matplotlib plot. Fortunately this is easy to do using the following code:

```
import matplotlib.pyplot as plt

plt.rc('font', size=10) #controls default text size
plt.rc('axes', titlesize=10) #fontsize of the title
plt.rc('axes', labelsz=10) #fontsize of the x and y labels
plt.rc('xtick', labelsz=10) #fontsize of the x tick labels
plt.rc('ytick', labelsz=10) #fontsize of the y tick labels
plt.rc('legend', fontsize=10) #fontsize of the legend
```

The following examples illustrates how to change the font sizes of various elements in the following matplotlib scatterplot:

```
import matplotlib.pyplot as plt
```

x =

y =

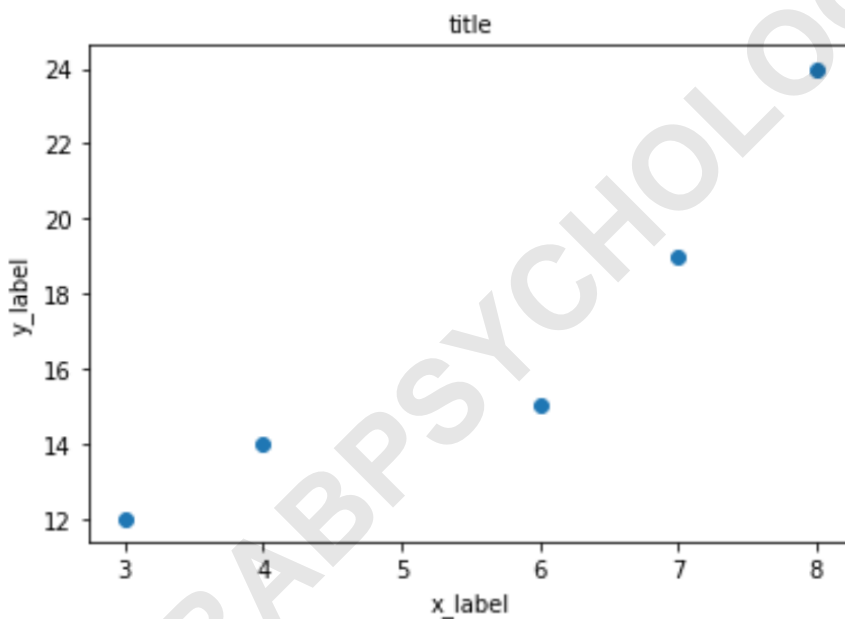
```
plt.scatter(x, y)
```

```
plt.title('title')
```

```
plt.xlabel('x_label')
```

```
plt.ylabel('y_label')
```

```
plt.show()
```



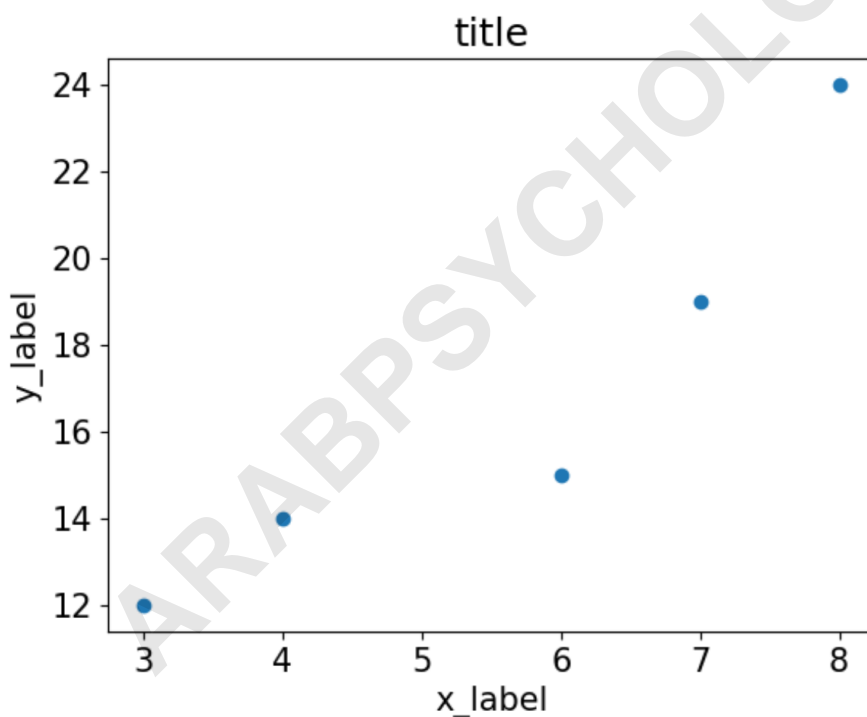
Note: The default font size for all elements is 10.

Example 1: Change the Font Size of All Elements

The following code shows how to change the font size of every element in the plot:

```
#set font of all elements to size 15  
plt.rc('font', size=15)
```

```
#create plot  
plt.scatter(x, y)  
plt.title('title')  
plt.xlabel('x_label')  
plt.ylabel('y_label')  
plt.show()
```

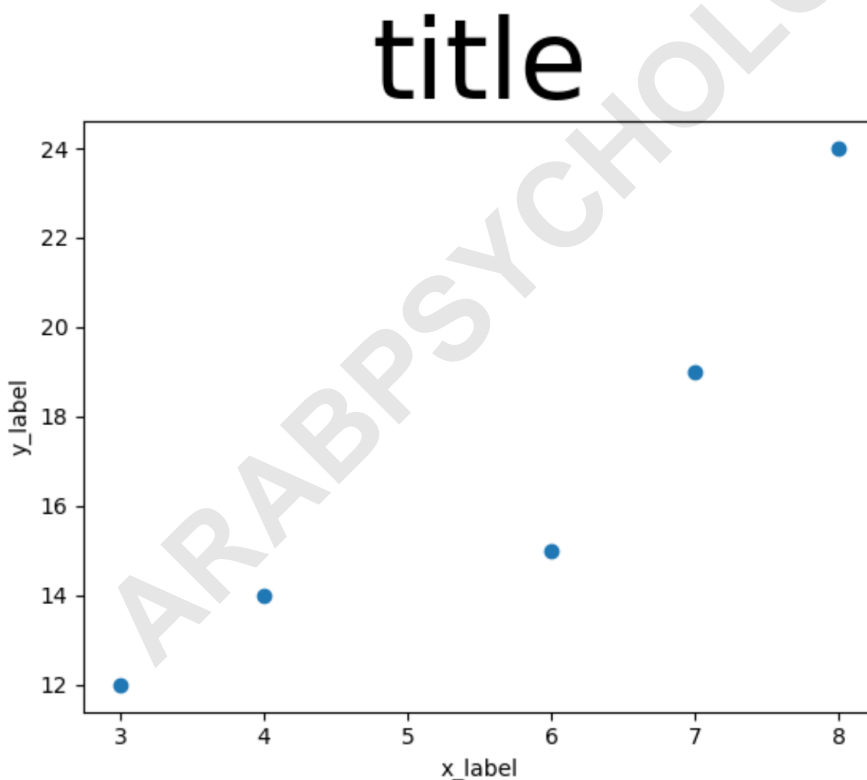


Example 2: Change the Font Size of the Title

The following code shows how to change the font size of the title of the plot:

```
#set title font to size 50  
plt.rc('axes', titlesize=50)
```

```
#create plot  
plt.scatter(x, y)  
plt.title('title')  
plt.xlabel('x_label')  
plt.ylabel('y_label')  
plt.show()
```



Example 3: Change the Font Size of the Axes Labels

The following code shows how to change the font size

of the axes labels of the plot:

```
#set axes labels font to size 20
```

```
plt.rc('axes', labelsiz=20)
```

```
#create plot
```

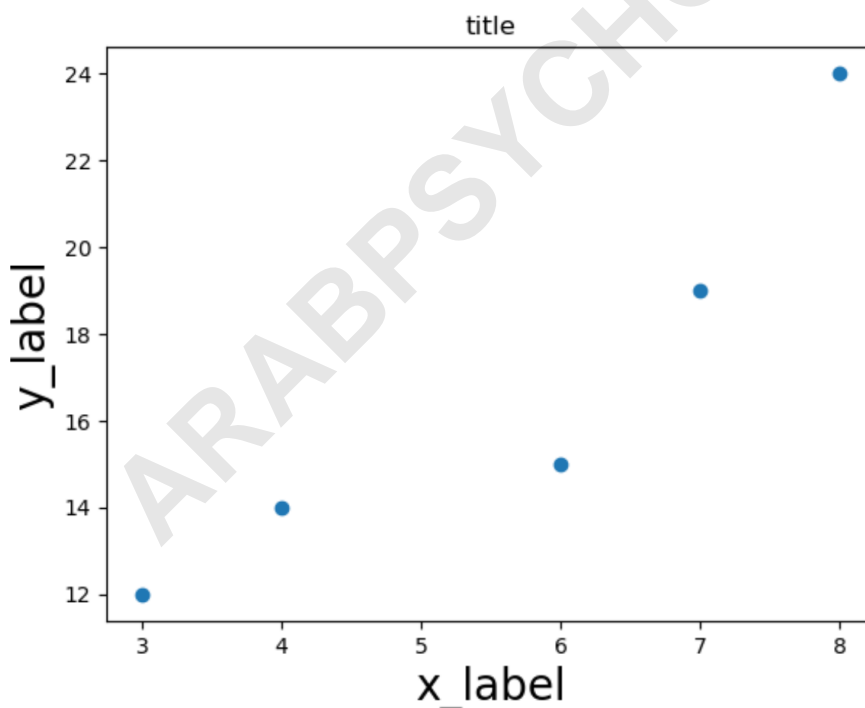
```
plt.scatter(x, y)
```

```
plt.title('title')
```

```
plt.xlabel('x_label')
```

```
plt.ylabel('y_label')
```

```
plt.show()
```



Example 4: Change the Font Size of the Tick Labels

The following code shows how to change the font size of the tick labels of the plot:

```
#set tick labels font to size 20
```

```
plt.rc('xtick', labelsizes=20)
```

```
plt.rc('ytick', labelsizes=20)
```

```
#create plot
```

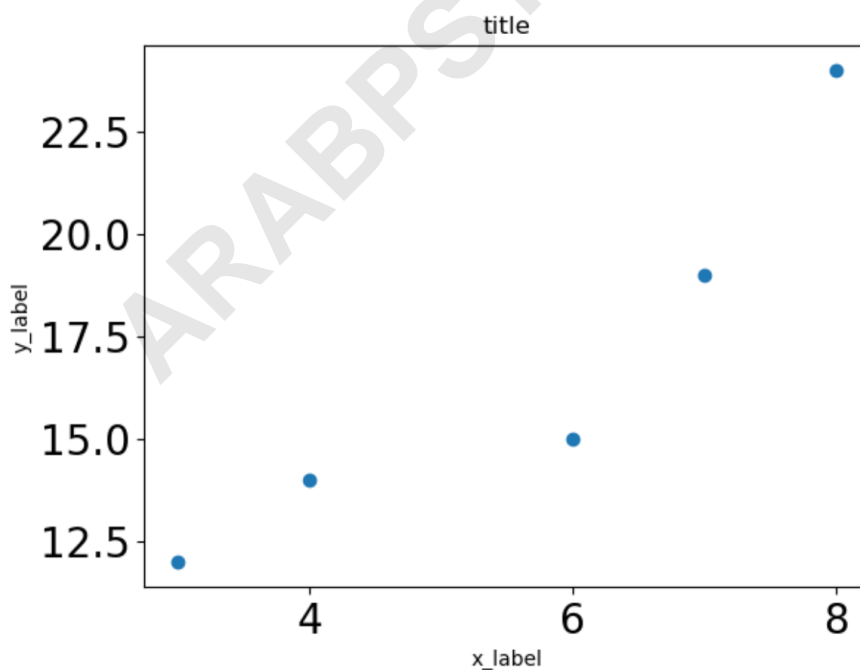
```
plt.scatter(x, y)
```

```
plt.title('title')
```

```
plt.xlabel('x_label')
```

```
plt.ylabel('y_label')
```

```
plt.show()
```



Bonus: Restore the Default Font Sizes

You can use the following code to restore all fonts to their default size at any point:

```
plt.rcParams.update(plt.rcParamsDefault)
```

You can find more Matplotlib tutorials [here](#).

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