

How can I adjust the subplot size in Matplotlib?

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RECOMMENDED CITATION

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Matplotlib is a popular Python library used for creating visualizations and plots. When working with multiple plots within a single figure, it is important to adjust the size of each subplot to ensure they are visually appealing and easy to interpret. In order to adjust the subplot size in Matplotlib, one can use the "plt.subplots" function and specify the number of rows and columns in the figure. This will create a grid of subplots, allowing for individual control of each subplot's size and position. Additionally, the "figsize" argument can be used to set the overall size of the figure, while the "gridspec_kw" argument can be used to customize the spacing between subplots. With these tools, users can easily adjust the subplot size in Matplotlib to create professional and visually appealing visualizations.

Adjust Subplot Size in Matplotlib

You can use the following syntax to adjust the size of subplots in Matplotlib:

#specify one size for all subplots

```
fig, ax = plt.subplots(2, 2, figsize=(10,7))
```

#specify individual sizes for subplots

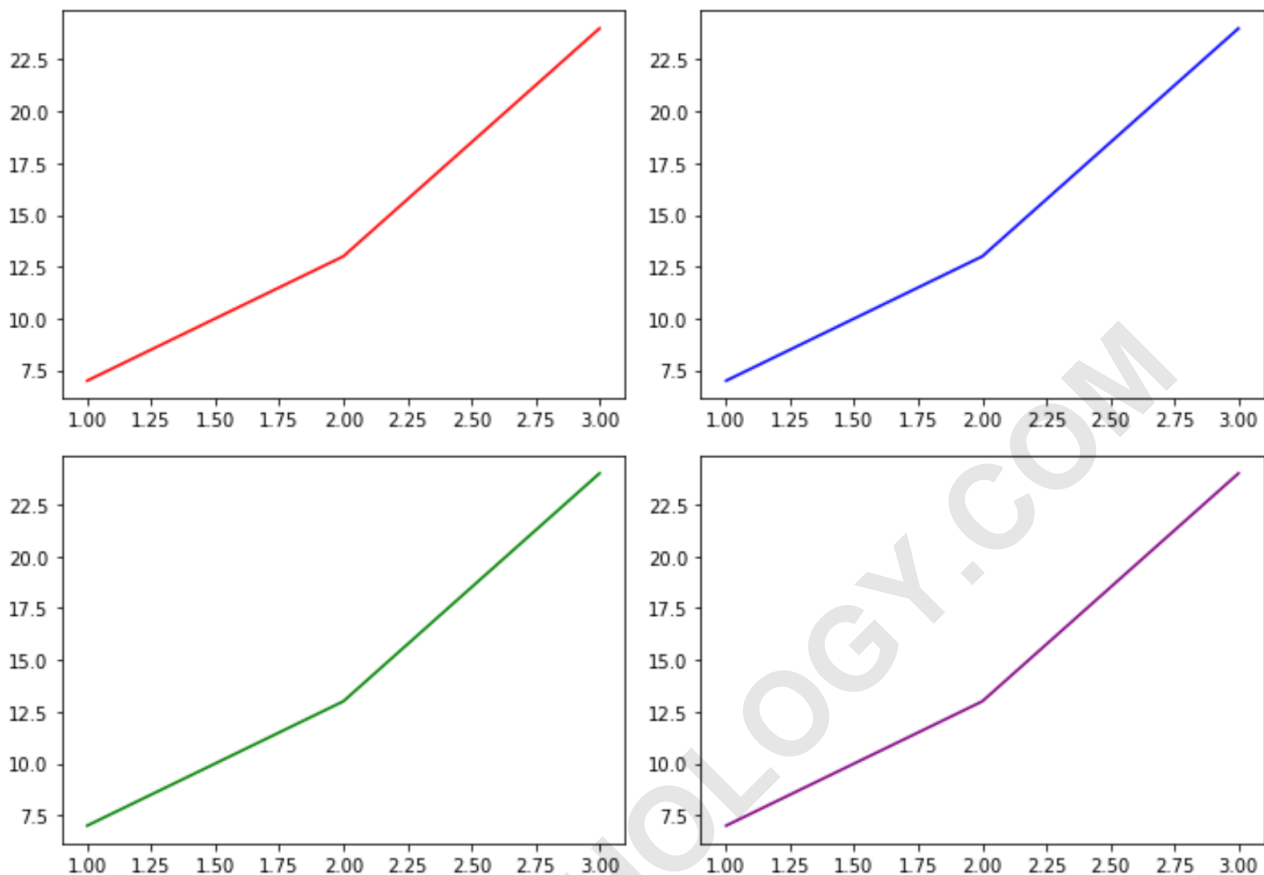
```
fig, ax = plt.subplots(1, 2, gridspec_kw={'width_ratios':  
})
```

The following examples show how to use this syntax in practice.

Example 1: Specify One Size for All Subplots

The following code shows how to specify one size for all subplots:

```
import matplotlib.pyplot as plt  
  
#define subplots  
fig, ax = plt.subplots(2, 2, figsize=(10,7))  
fig.tight_layout()  
  
#define data  
x =  
y =  
  
#create subplots  
ax.plot(x, y, color='red')  
ax.plot(x, y, color='blue')  
ax.plot(x, y, color='green')  
ax.plot(x, y, color='purple')
```



We can easily change the size of the subplots by changing the values in the figsize argument:

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

```
#define subplots
```

```
fig, ax = plt.subplots(2, 2, figsize=(5,5))
```

```
fig.tight_layout()
```

```
#define data
```

```
X =
```

y =

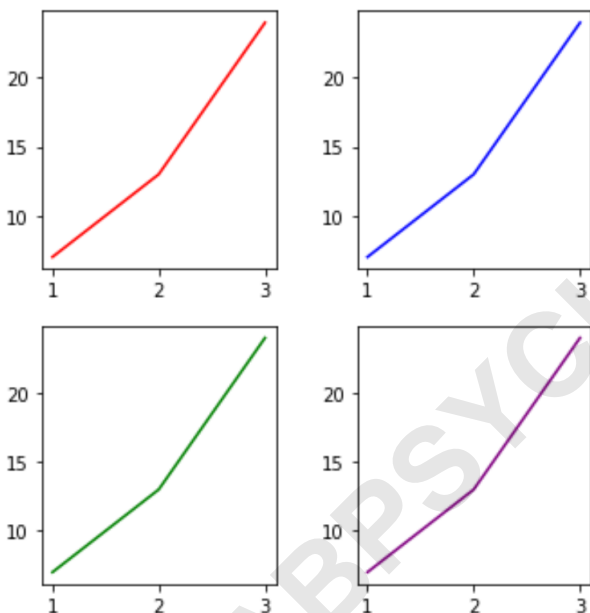
#create subplots

```
ax.plot(x, y, color='red')
```

```
ax.plot(x, y, color='blue')
```

```
ax.plot(x, y, color='green')
```

```
ax.plot(x, y, color='purple')
```



Example 2: Specify Sizes for Individual Subplots

The following code shows how to specify different sizes for individual subplots:

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

#define subplots

```
fig, ax = plt.subplots(1, 2, gridspec_kw={'width_ratios':  
})  
fig.tight_layout()
```

```
#define data
```

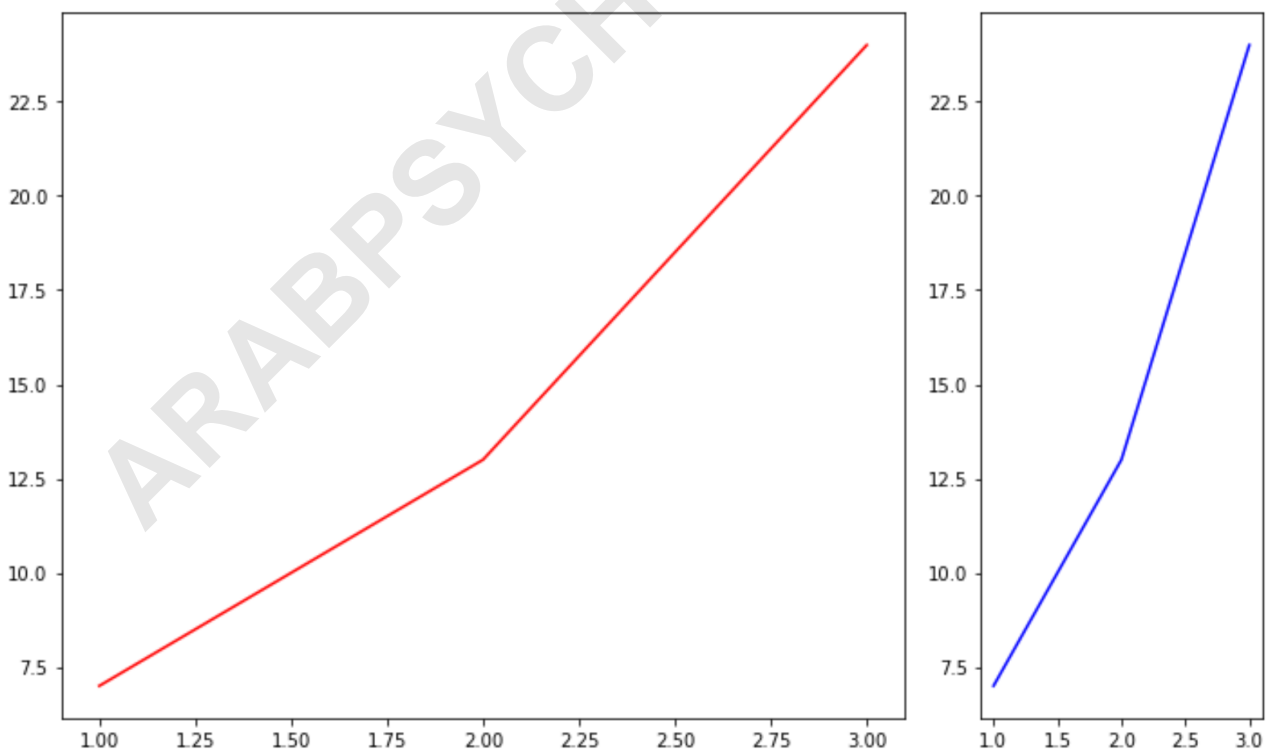
```
x =
```

```
y =
```

```
#create subplots
```

```
ax.plot(x, y, color='red')
```

```
ax.plot(x, y, color='blue')
```



We can easily change the size of the subplots by

changing the values in the `width_ratios` argument:

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

```
#define subplots
```

```
fig, ax = plt.subplots(1, 2, gridspec_kw={'width_ratios':  
})
```

```
fig.tight_layout()
```

```
#define data
```

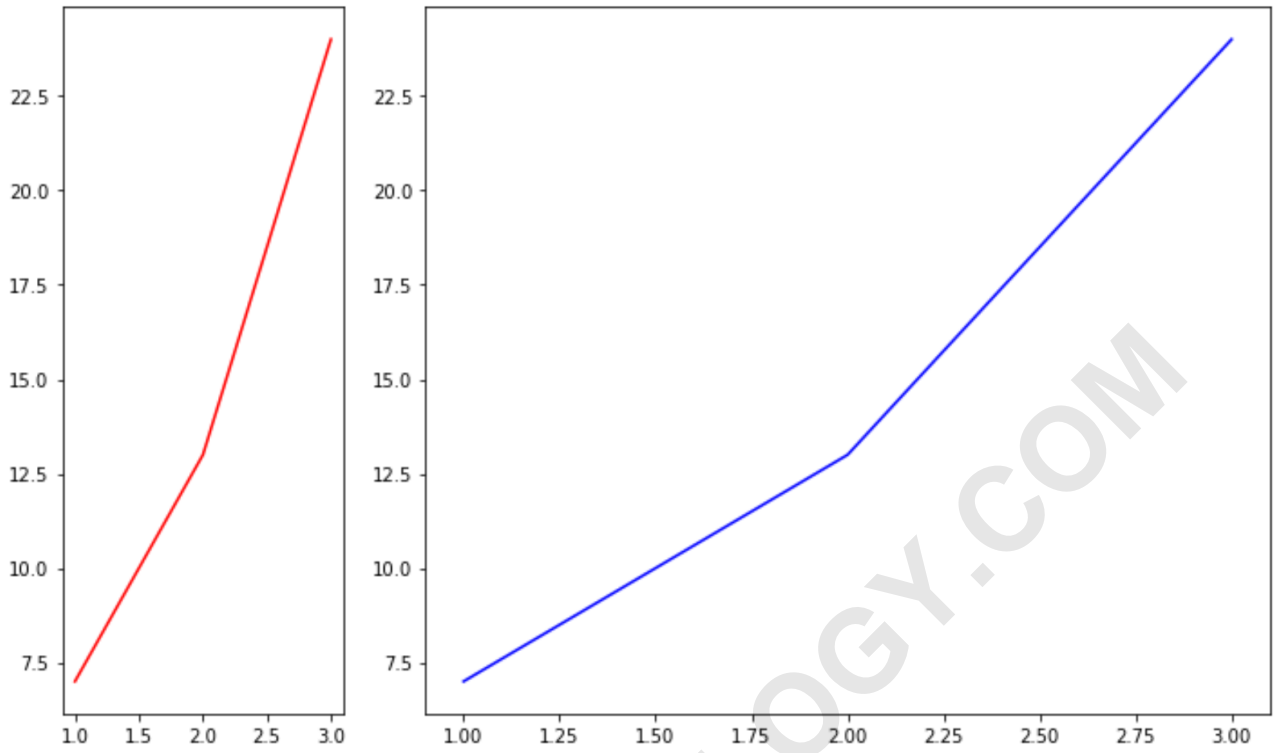
```
x =
```

```
y =
```

```
#create subplots
```

```
ax.plot(x, y, color='red')
```

```
ax.plot(x, y, color='blue')
```



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