

```
In [1]: import matplotlib.pyplot as plt
import numpy as np

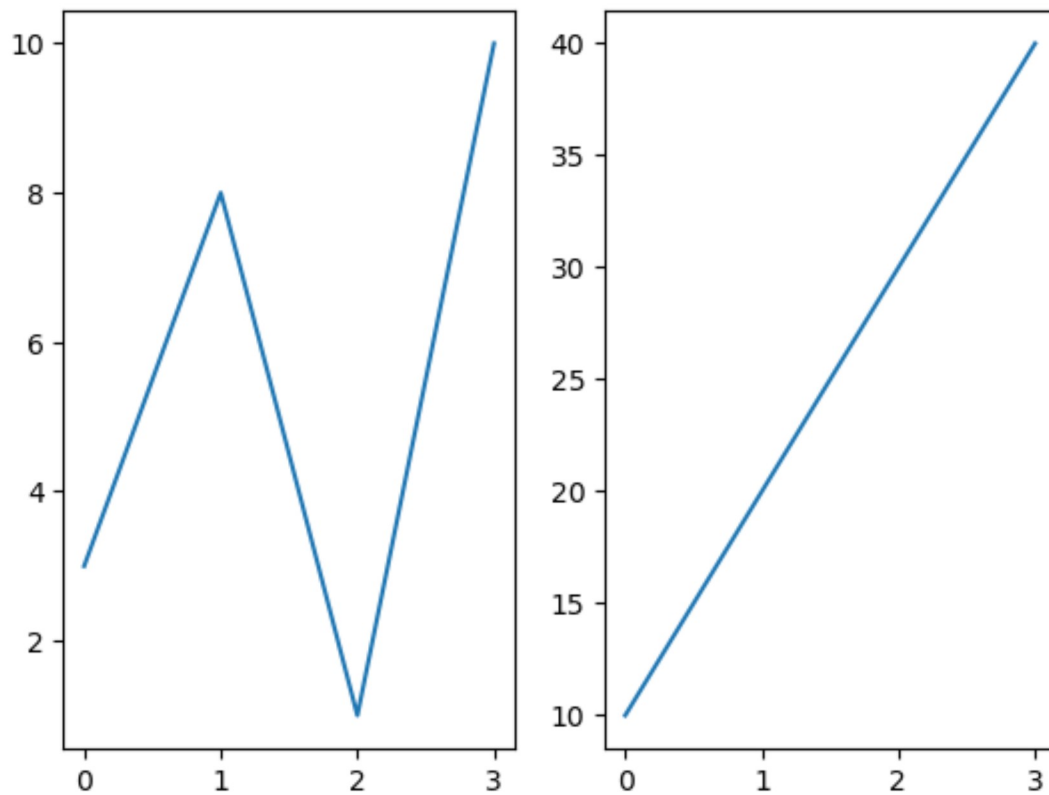
#plot 1:
x = np.array([0, 1, 2, 3])
y = np.array([3, 8, 1, 10])

plt.subplot(1, 2, 1)
plt.plot(x,y)

#plot 2:
x = np.array([0, 1, 2, 3])
y = np.array([10, 20, 30, 40])

plt.subplot(1, 2, 2)
plt.plot(x,y)

plt.show()
```



## The subplot() Function

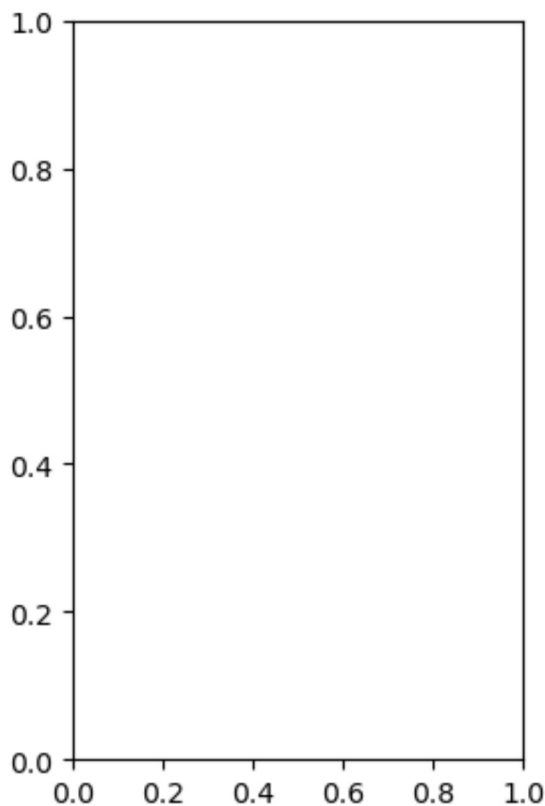
The subplot() function takes three arguments that describes the layout of the figure.

The layout is organized in rows and columns, which are represented by the first and second argument.

The third argument represents the index of the current plot.

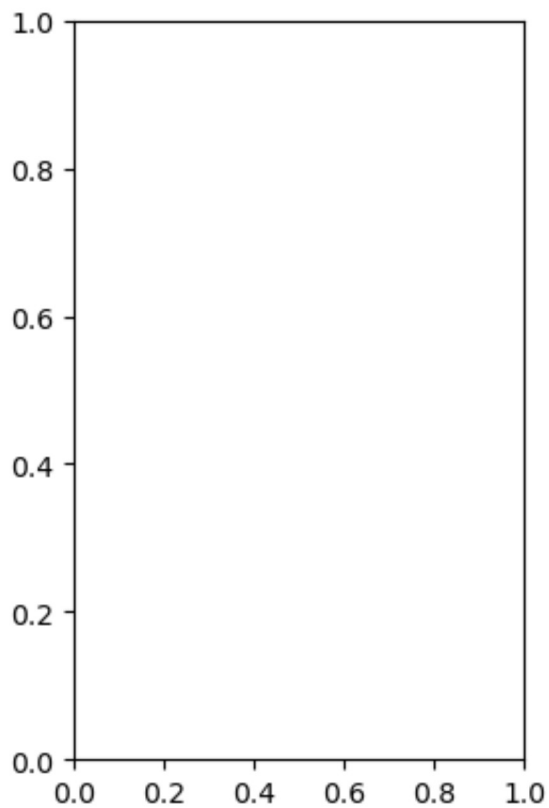
```
In [2]: plt.subplot(1, 2, 1)  
#the figure has 1 row, 2 columns, and this plot is the first plot.
```

Out[2]: <Axes: >



```
In [3]: plt.subplot(1, 2, 2)  
#the figure has 1 row, 2 columns, and this plot is the second plot.
```

Out[3]: <Axes: >



## Draw 2 plots on top of each other

```
In [5]: import matplotlib.pyplot as plt
import numpy as np

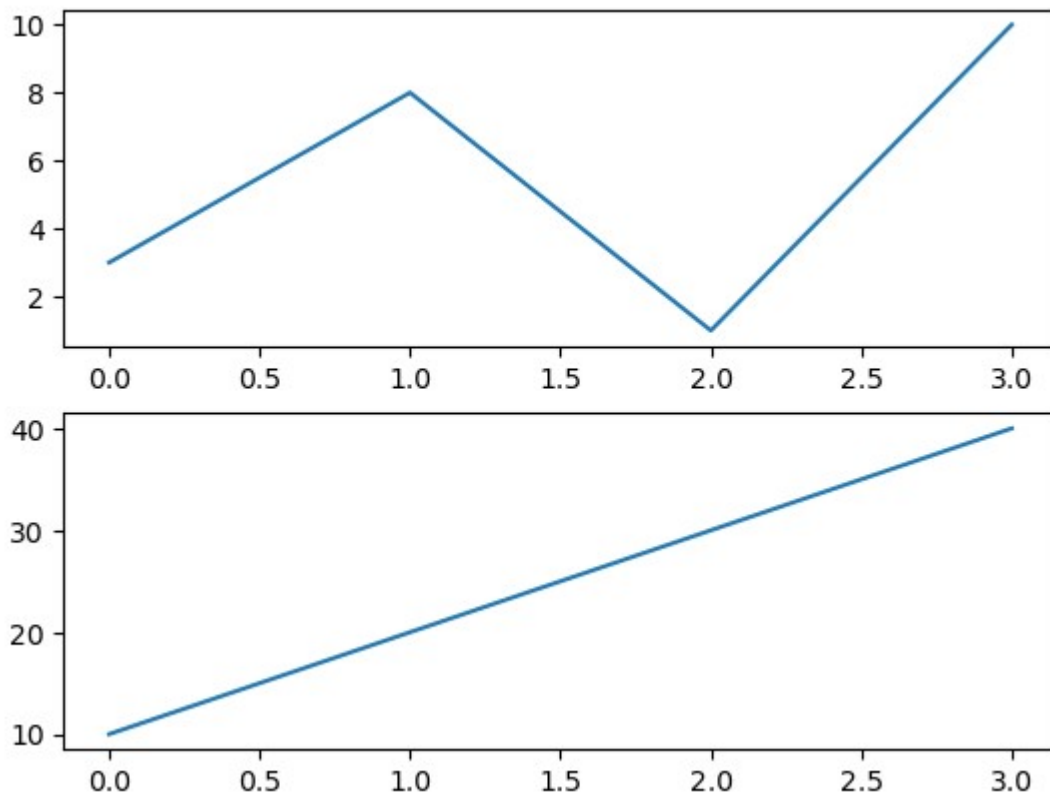
#plot 1:
x = np.array([0, 1, 2, 3])
y = np.array([3, 8, 1, 10])

plt.subplot(2, 1, 1)
plt.plot(x,y)

#plot 2:
x = np.array([0, 1, 2, 3])
y = np.array([10, 20, 30, 40])

plt.subplot(2, 1, 2)
plt.plot(x,y)

plt.show()
```



You can draw as many plots you like on one figure, just describe the number of rows, columns, and the index of the plot.

Example: Draw 6 plots.

```
In [6]: import matplotlib.pyplot as plt
import numpy as np

x = np.array([0, 1, 2, 3])
y = np.array([3, 8, 1, 10])

plt.subplot(2, 3, 1)
plt.plot(x,y)

x = np.array([0, 1, 2, 3])
y = np.array([10, 20, 30, 40])

plt.subplot(2, 3, 2)
plt.plot(x,y)

x = np.array([0, 1, 2, 3])
y = np.array([3, 8, 1, 10])

plt.subplot(2, 3, 3)
plt.plot(x,y)

x = np.array([0, 1, 2, 3])
y = np.array([10, 20, 30, 40])

plt.subplot(2, 3, 4)
plt.plot(x,y)

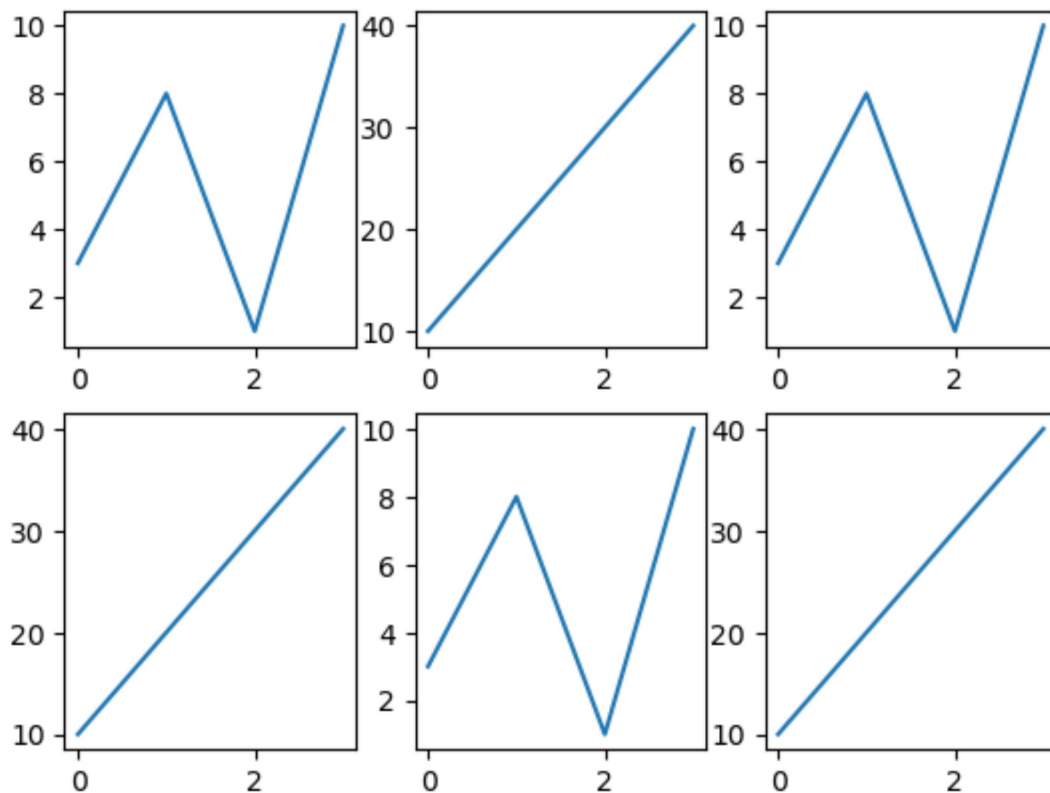
x = np.array([0, 1, 2, 3])
y = np.array([3, 8, 1, 10])

plt.subplot(2, 3, 5)
plt.plot(x,y)

x = np.array([0, 1, 2, 3])
y = np.array([10, 20, 30, 40])

plt.subplot(2, 3, 6)
plt.plot(x,y)

plt.show()
```



Add a title to each plot with the `title()` function.

```
In [7]: import matplotlib.pyplot as plt
import numpy as np

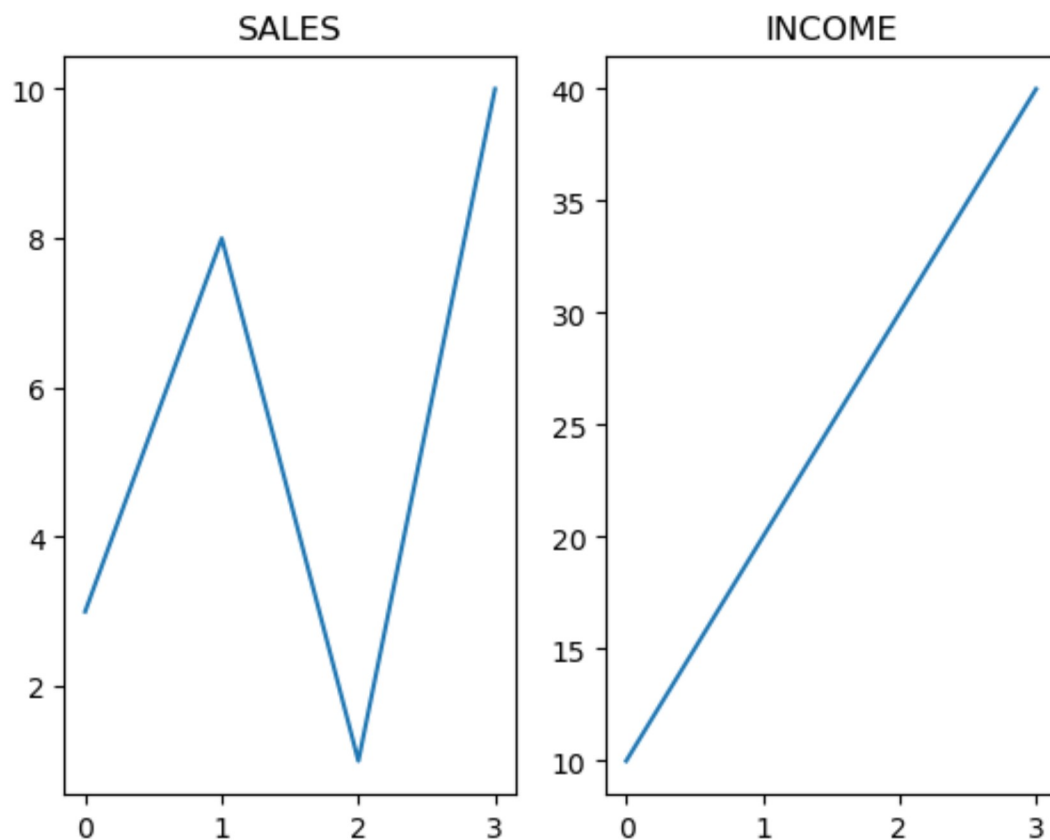
#plot 1:
x = np.array([0, 1, 2, 3])
y = np.array([3, 8, 1, 10])

plt.subplot(1, 2, 1)
plt.plot(x,y)
plt.title("SALES")

#plot 2:
x = np.array([0, 1, 2, 3])
y = np.array([10, 20, 30, 40])

plt.subplot(1, 2, 2)
plt.plot(x,y)
plt.title("INCOME")

plt.show()
```



Super Title: You can add a title to the entire figure with the `suptitle()` function.

```
In [8]: import matplotlib.pyplot as plt
import numpy as np
```

```
#plot 1:
```

```
x = np.array([0, 1, 2, 3])
y = np.array([3, 8, 1, 10])
```

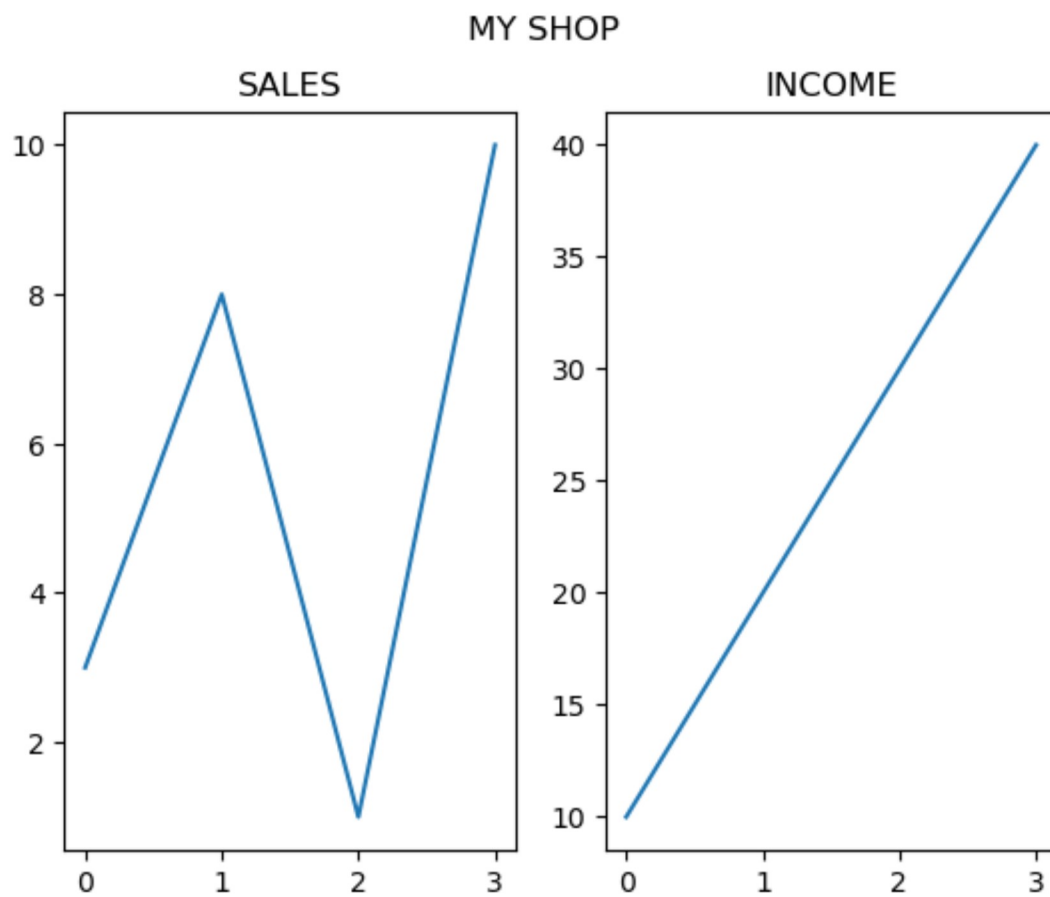
```
plt.subplot(1, 2, 1)
plt.plot(x,y)
plt.title("SALES")
```

```
#plot 2:
```

```
x = np.array([0, 1, 2, 3])
y = np.array([10, 20, 30, 40])
```

```
plt.subplot(1, 2, 2)
plt.plot(x,y)
plt.title("INCOME")
```

```
plt.suptitle("MY SHOP")
plt.show()
```



In [ ]: