

Plotando Gráficos no Python

1º Passo: Instale a biblioteca Matplotlib

```
pip install matplotlib
```

Ou você pode baixar a biblioteca no <https://pypi.python.org/pypi/matplotlib> e instalar manualmente.

2º Passo: Utilize o código abaixo para plotar o gráfico de uma linha

```
# importing the required module
```

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

```
# x axis values
```

```
x = [1,2,3]
```

```
# corresponding y axis values
```

```
y = [2,4,1]
```

```
# plotting the points
```

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

```
# naming the x axis
```

```
plt.xlabel('x - axis')
```

```
# naming the y axis
```

```
plt.ylabel('y - axis')
```

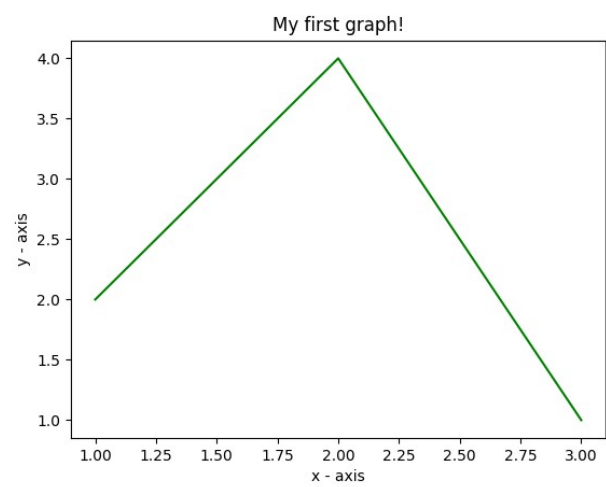
```
# giving a title to my graph
```

```
plt.title('My first graph!')
```

```
# function to show the plot
```

```
plt.show()
```

Saída esperada:



3º Passo: Vamos plitar gráficos com duas linhas, utilizando o código abaixo:

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

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

```
# line 1 points
```

```
x1 = [1,2,3]
```

```
y1 = [2,4,1]
```

```
# plotting the line 1 points
```

```
plt.plot(x1, y1, label = "line 1")
```

```
# line 2 points
```

```
x2 = [1,2,3]
```

```
y2 = [4,1,3]
```

```
# plotting the line 2 points
```

```
plt.plot(x2, y2, label = "line 2")
```

```
# naming the x axis
```

```
plt.xlabel('x - axis')
```

```
# naming the y axis
```

```
plt.ylabel('y - axis')
```

```
# giving a title to my graph
```

```
plt.title('Two lines on same graph!')
```

```
# show a legend on the plot
```

```
plt.legend()
```

```
# function to show the plot
```

```
plt.show()
```

Two lines on same graph!

