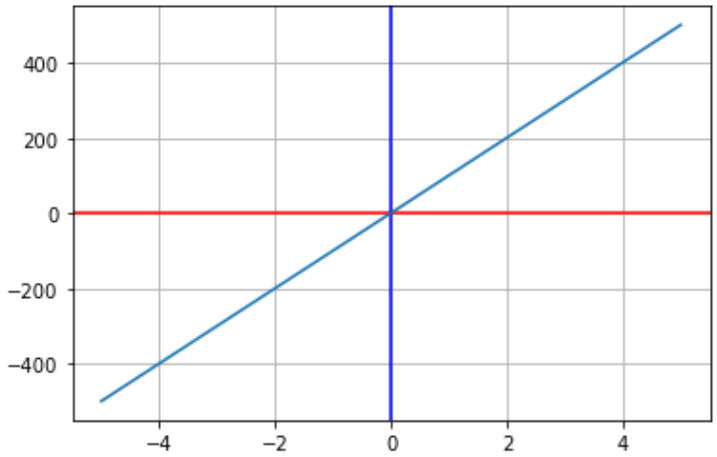
In [1]:
```
import numpy as np
import sympy as sym
import matplotlib.pyplot as plt
```

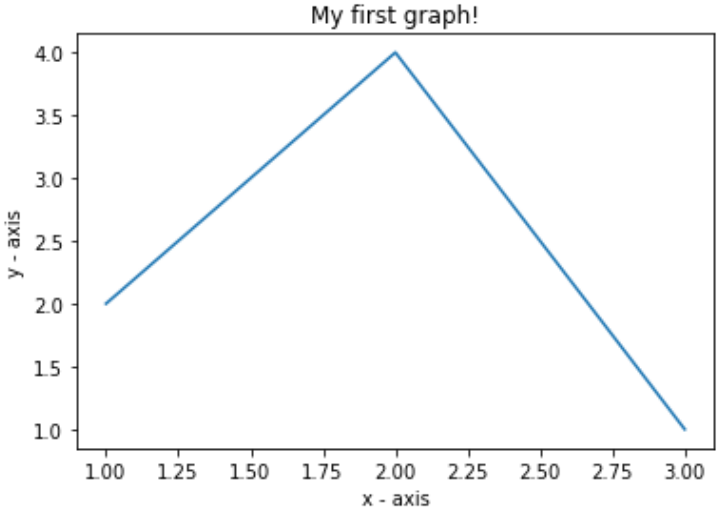
In [18]:
```
x=np.linspace(-5,5,100)
y=100*x+1
```

In [17]:
```
plt.axhline(y=0,color='red')
plt.axvline(x=0,c='blue')
plt.grid()
plt.plot(x,y)
```

Out[17]:
```
[<matplotlib.lines.Line2D at 0x2997503bc40>]
```

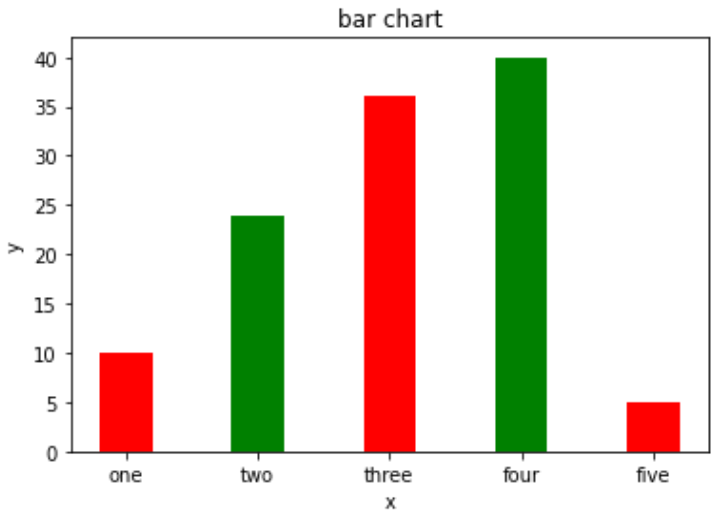


In [20]:
```
import matplotlib.pyplot as plt
x = [1,2,3]
y = [2,4,1]

plt.plot(x,y)

plt.xlabel('x - axis')

plt.ylabel('y - axis')

plt.title('My first graph!')


plt.show()
```



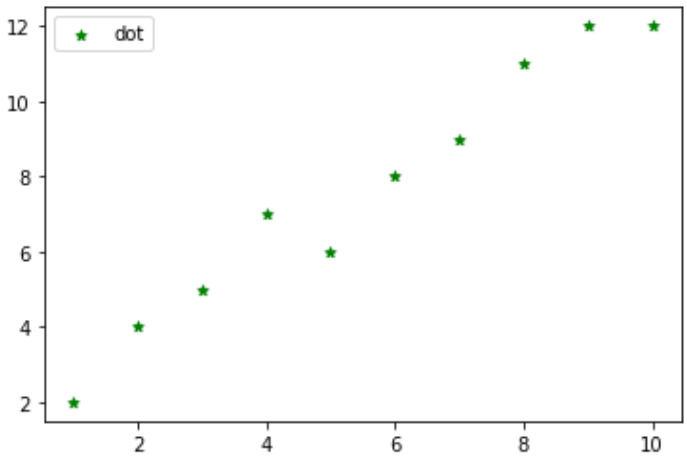
In [32]:
```
import matplotlib.pyplot as plt
left = [1, 3 ,5,7,9]
```

```
height = [10, 24, 36, 40, 5]
tick_label = ['one', 'two', 'three', 'four', 'five']
plt.bar(left, height, tick_label = tick_label,
        width = 0.8, color = ['red', 'green'])
plt.xlabel('x')
plt.ylabel('y')
plt.title('bar chart')
plt.show()
```



In [35]:

```
import matplotlib.pyplot as plt

x = [1,2,3,4,5,6,7,8,9,10]

y = [2,4,5,7,6,8,9,11,12,12]

plt.scatter(x, y, label= "dot", color= "green",
                        marker= "*", s=30)


plt.legend()

plt.show()
```



In [36]:

```
import matplotlib.pyplot as plt

activities = ['eat', 'sleep', 'work', 'play']

slices = [3, 7, 8, 6]

colors = ['r', 'y', 'g', 'b']
```

```
plt.pie(slices, labels = activities, colors=colors,
                startangle=90, shadow = True, explode = (0, 0, 0.1, 0),
                radius = 1.2, autopct = '%1.1f%%')

plt.legend()

plt.show()
```

In [ ]: