Matplotlib Exercises

** * NOTE: ALL THE COMMANDS FOR PLOTTING A FIGURE SHOULD ALL GO IN THE SAME CELL. SEPARATING THEM OUT INTO MULTIPLE CELLS MAY CAUSE NOTHING TO SHOW UP. * **

Exercises

Follow the instructions to recreate the plots using this data:

Data

In [1]:
```
import numpy as np
x = np.arange(0,100)
y = x*2
z = x**2
```

** Import matplotlib.pyplot as plt and set %matplotlib inline if you are using the jupyter notebook. What command do you use if you aren't using the jupyter notebook?**

In [3]:
```

```

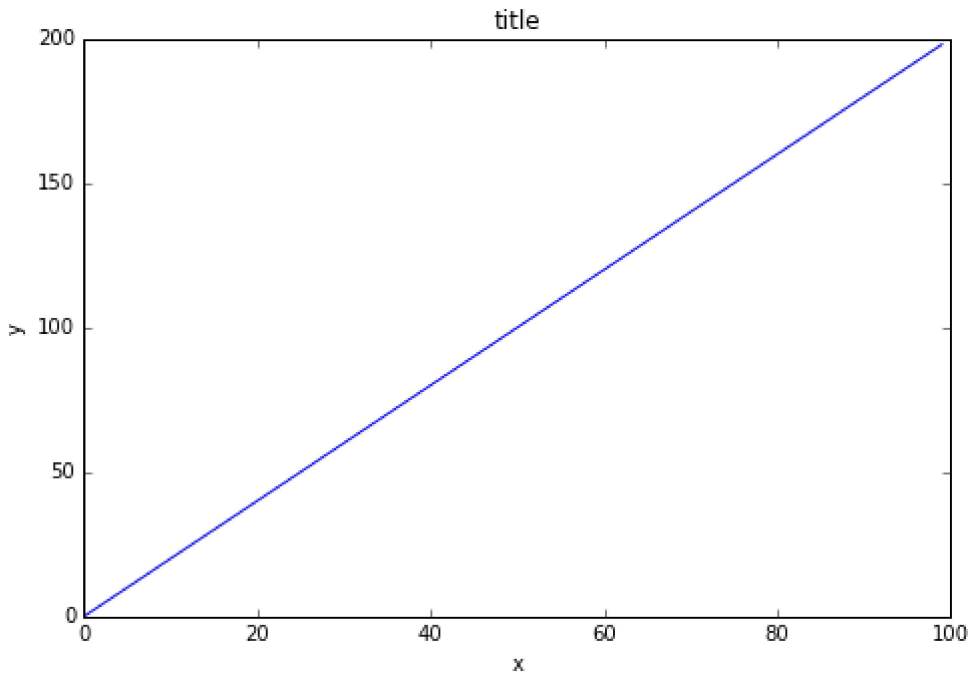
Exercise 1

** Follow along with these steps: **

- ** Create a figure object called fig using plt.figure() **
- ** Use add_axes to add an axis to the figure canvas at [0,0,1,1]. Call this new axis ax. **
- ** Plot (x,y) on that axes and set the labels and titles to match the plot below:**

In [4]:
```
1
```

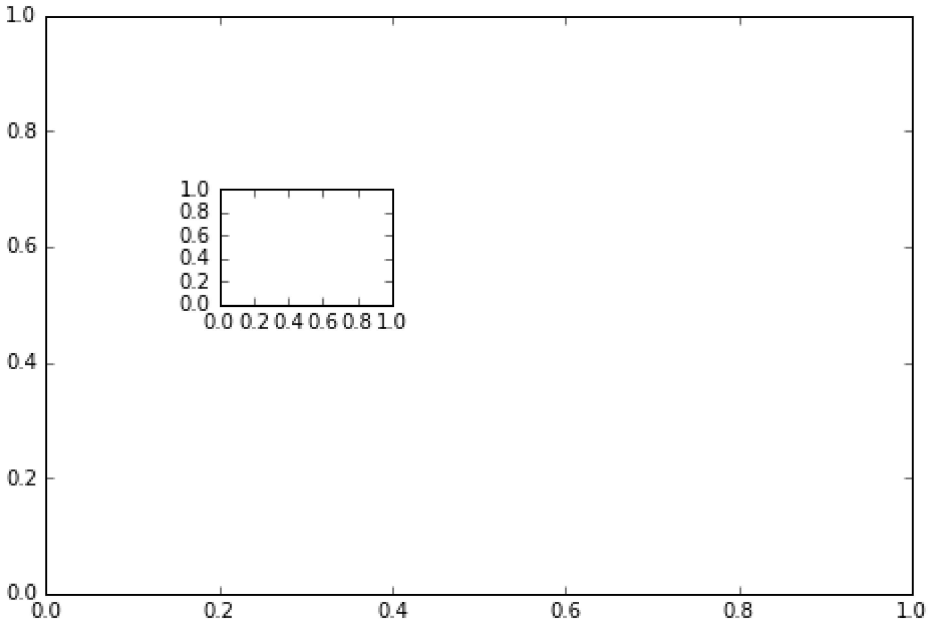
Out[4]: <matplotlib.text.Text at 0x111534c50>



Exercise 2

** Create a figure object and put two axes on it, ax1 and ax2. Located at [0,0,1,1] and [0.2,0.5,.2,.2] respectively.**

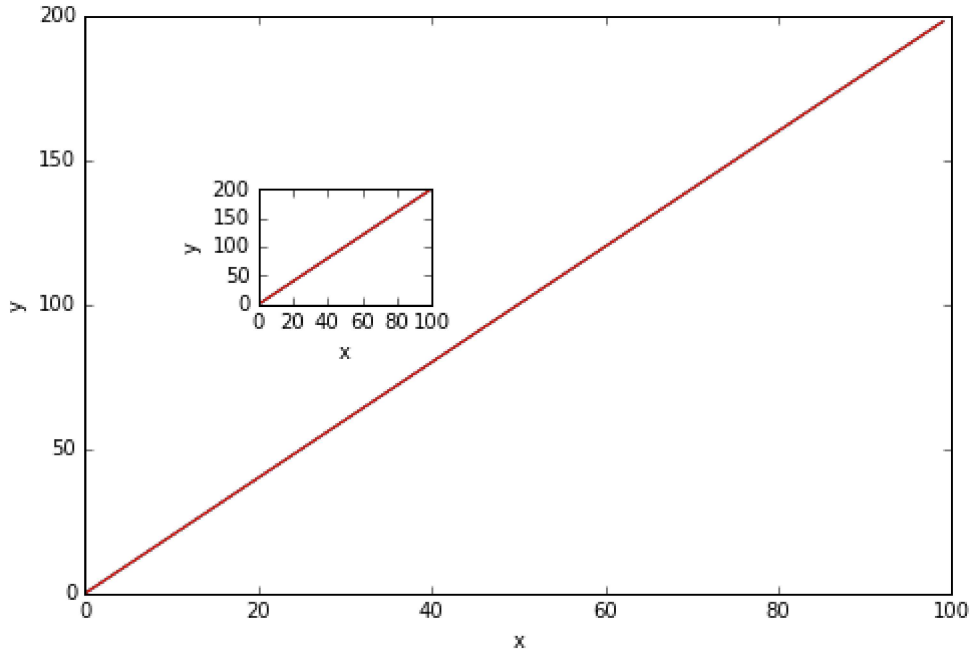
In [39]:
```
1
```



** Now plot (x,y) on both axes. And call your figure object to show it.**

In [42]:
```
1
```

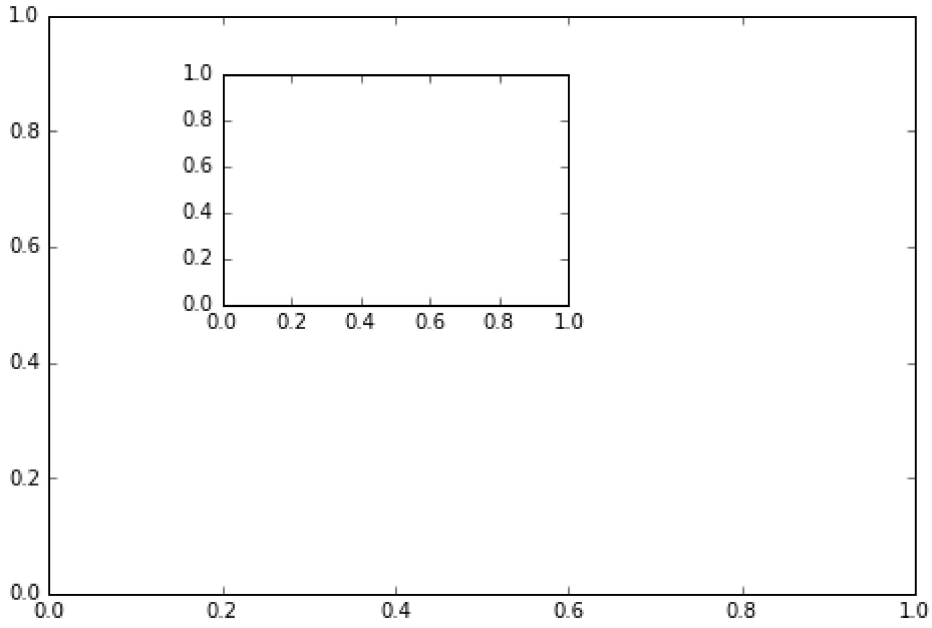
Out[42]:



Exercise 3

** Create the plot below by adding two axes to a figure object at [0,0,1,1] and [0.2,0.5,.4,.4]**

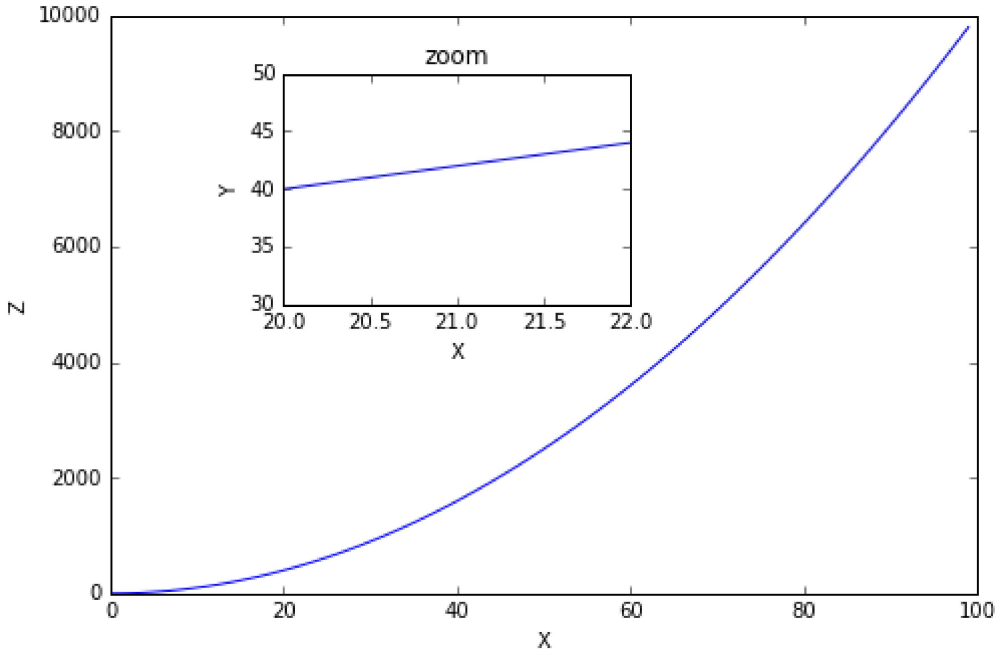
In [6]:
```
1
```

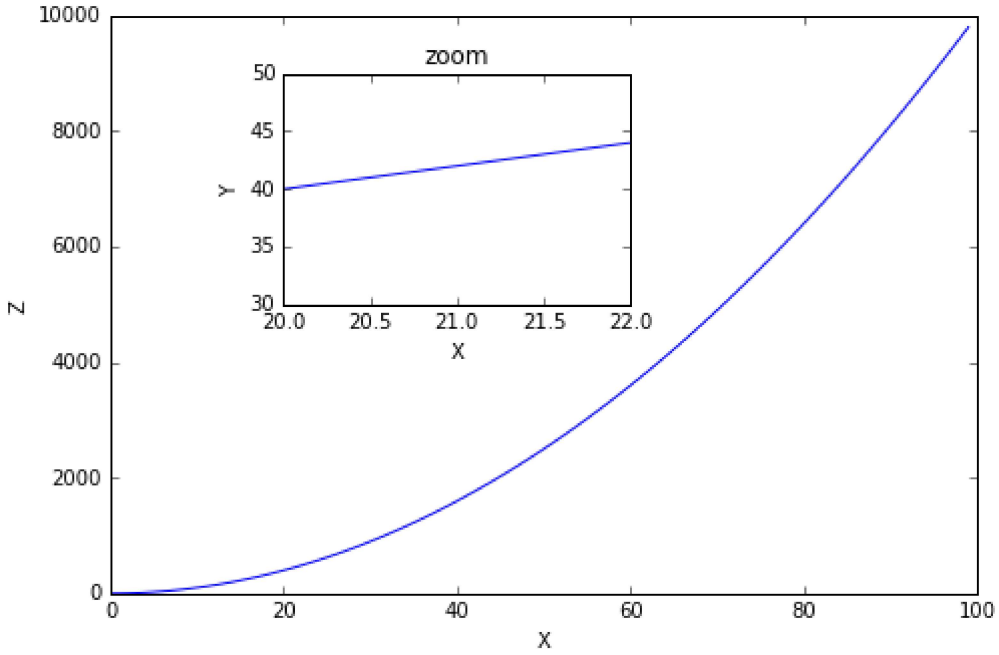


** Now use x,y, and z arrays to recreate the plot below. Notice the xlimits and y limits on the inserted plot:**

In [5]:
```
1
```

Out[5]:

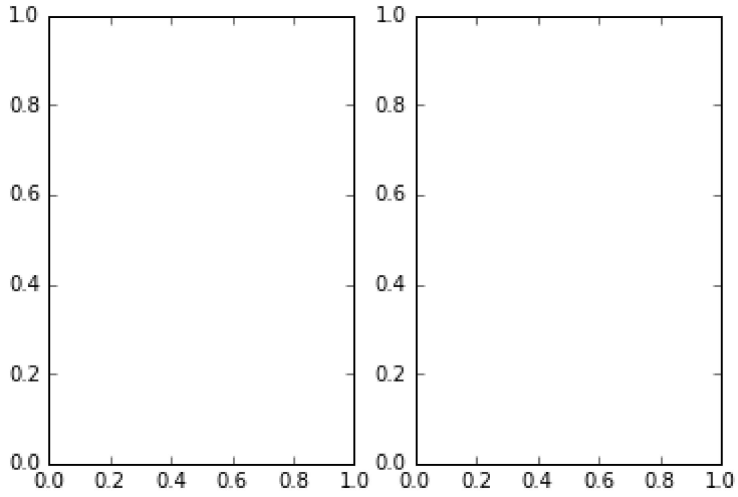




Exercise 4

** Use plt.subplots(nrows=1, ncols=2) to create the plot below.**

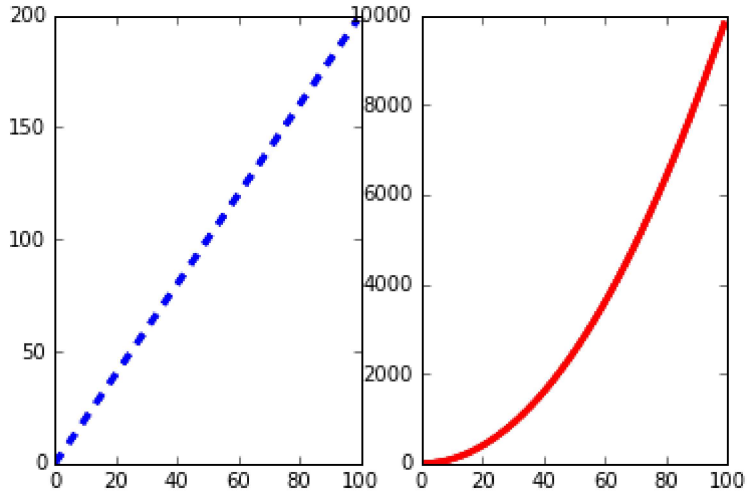
In [48]:
```
1
```



** Now plot (x,y) and (x,z) on the axes. Play around with the linewidth and style**

In [51]:
```
1
```

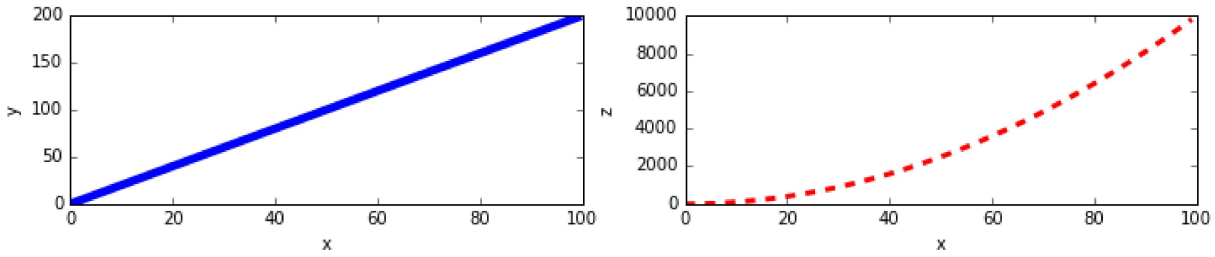
Out[51]:



** See if you can resize the plot by adding the figsize() argument in plt.subplots() are copying and pasting your previous code.**

In [32]:
```
1
```

Out[32]: <matplotlib.text.Text at 0x1141b4ba8>



Great Job!