

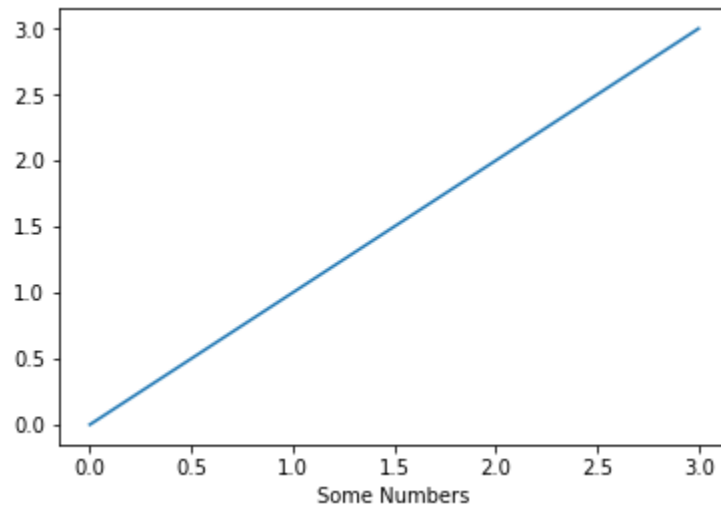
# `matplotlib.pyplot`: A MATLAB-like Python plotting package

# matplotlib.pyplot

- A collection of command style functions that make matplotlib work like MATLAB
- After the pyplot object is instantiated, the commands are almost in one-to-one correspondence with MATLAB
- To use "inline" in the Jupyter Notebook, use the cell magic command `%matplotlib inline`

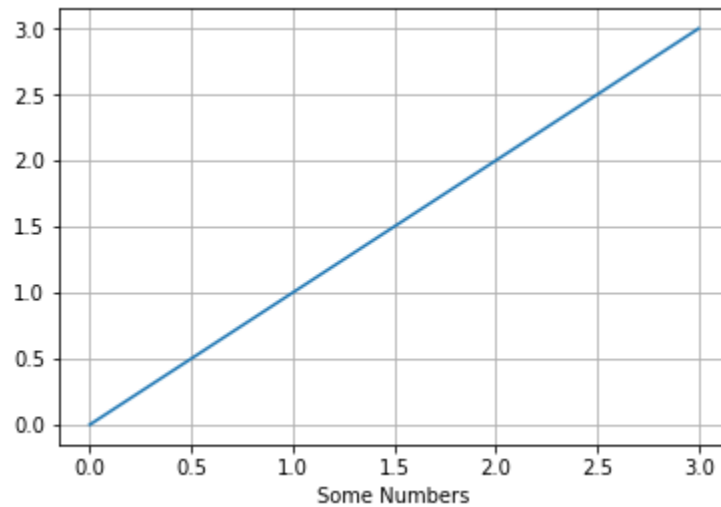
# Basic Example

```
%matplotlib inline  
  
import matplotlib.pyplot as plt  
  
plt.plot([0, 1, 2, 3])  
plt.xlabel("Some Numbers");
```



# Changing the plot style

```
plt.plot([0, 1, 2, 3])  
plt.xlabel("Some Numbers");  
plt.grid()
```

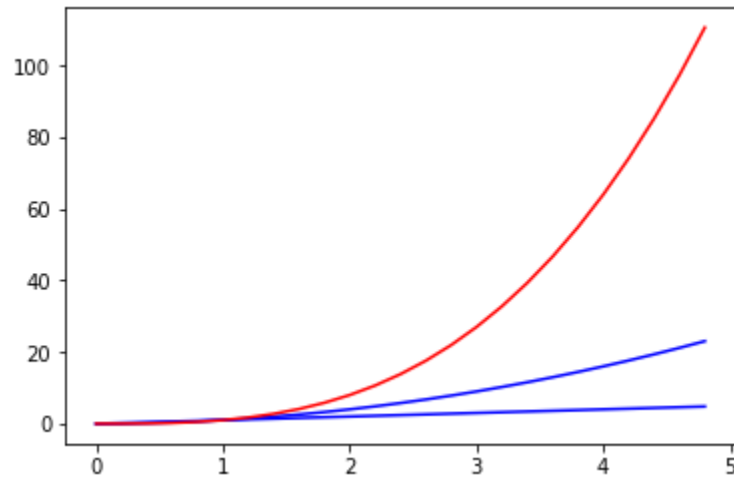


# Use Numpy data

```
import numpy as np
```

```
t = np.arange(0,5,0.2)
```

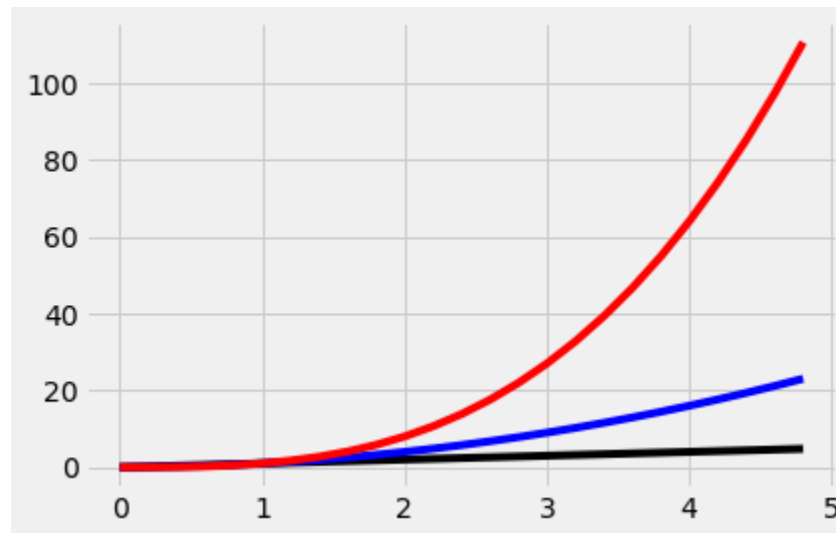
```
plt.plot(t, t, 'b', t, t ** 2, 'b', t, t ** 3, 'r');
```



# With style

```
import matplotlib

matplotlib.style.use('fivethirtyeight')
plt.plot(t, t, 'k', t, t ** 2, 'b', t, t ** 3, 'r');
```



# Other stuff

- Contour plots, surface plots
- Other plotting libraries for Python
  - Bokeh
  - ggplot
  - plotly