Matplotlib

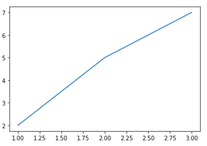
In [1]:
```
%matplotlib inline
```

In [2]:
```
from matplotlib import pyplot as plt
```

Basic Chart

In [3]:
```
plt.plot([1,2,3],[2,5,7])
```

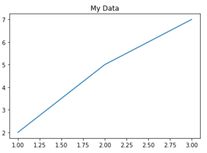
Out[3]:
```
[<matplotlib.lines.Line2D at 0x24ef418e590>]
```



Adding a title to the Chart

In [4]:
```
plt.plot([1,2,3],[2,5,7])
plt.title('My Data')
```

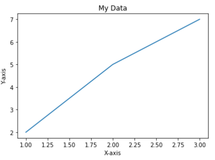
Out[4]:
```
Text(0.5, 1.0, 'My Data')
```



Adding X and Y Labels

In [5]:
```
plt.plot([1,2,3],[2,5,7])
plt.title('My Data')
plt.xlabel('X-axis')
plt.ylabel('Y-axis')
```

Out[5]:
```
Text(0, 0.5, 'Y-axis')
```



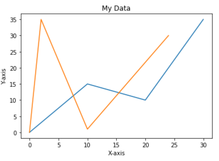
Plotting more than one data on a chart

In [6]:
```
plt.title('My Data')
plt.xlabel('X-axis')
plt.ylabel('Y-axis')

x = [0,10,20,30]
y = [0,15,10,35]

x2 = [0,2,10,24]
y2 = [0,35,1,30]
plt.plot(x,y)
plt.plot(x2,y2)
```

Out[6]:
```
[<matplotlib.lines.Line2D at 0x24ef6389930>]
```



Changing the style of a Plot

In [7]:
```
from matplotlib import style
```

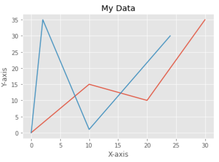
In [8]:
```
style.use('ggplot')
```

In [9]:
```
plt.title('My Data')
plt.xlabel('X-axis')
plt.ylabel('Y-axis')

x = [0,10,20,30]
y = [0,15,10,35]

x2 = [0,2,10,24]
y2 = [0,35,1,30]
plt.plot(x,y)
plt.plot(x2,y2)
```

Out[9]:
```
[<matplotlib.lines.Line2D at 0x24ef63fa230>]
```



Legend in Plot

In [10]:
```
plt.title('My Data')
plt.xlabel('X-axis')
plt.ylabel('Y-axis')

x = [0,10,20,30]
y = [0,15,10,35]

x2 = [0,2,10,24]
y2 = [0,35,1,30]
plt.plot(x,y, label='Company-1')
plt.plot(x2,y, label='Company-2')
plt.legend()
```

Out[10]:
```
<matplotlib.legend.Legend at 0x24ef646a6b0>
```

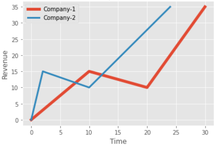
Line width of a line

In [11]:
```
plt.title('My Data')
plt.xlabel('Time')
plt.ylabel('Revenue')

x = [0,10,20,30]
y = [0,15,10,35]

x2 = [0,2,10,24]
y2 = [0,35,1,30]
plt.plot(x,y, label='Company-1', linewidth=5)
plt.plot(x2,y, label='Company-2', linewidth=3)
plt.legend()
```

Out[11]:
```
<matplotlib.legend.Legend at 0x24ef6339ed0>
```



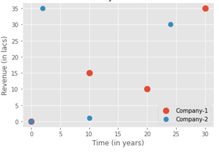
Scatter Plot

In [12]:
```
plt.title('My Data')
plt.xlabel('Time (in years)')
plt.ylabel('Revenue (in lacs)')

x = [0,10,20,30]
y = [0,15,10,35]

x2 = [0,2,10,24]
y2 = [0,35,1,30]
plt.scatter(x,y, label='Company-1', linewidth=5)
plt.scatter(x2,y2, label='Company-2', linewidth=3)
plt.legend()
```

Out[12]:
```
<matplotlib.legend.Legend at 0x24ef63ac9d0>
```



End