Chapter 4 - Practical Data Visualization

Segment 2 - Defining elements of a plot

```
import numpy as np
from numpy.random import randn
import pandas as pd
from pandas import Series, DataFrame

import matplotlib.pyplot as plt
from matplotlib import rcParams


%matplotlib inline
rcParams['figure.figsize']= 5,4
```

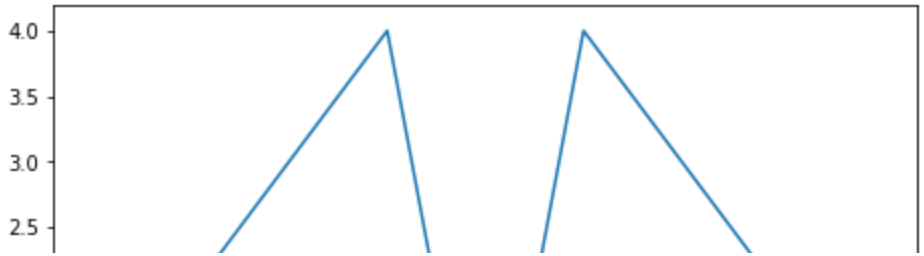
Defining axes, ticks, and grids

```
x = range(1,10)
y = [1,2,3,4,0,4,3,2,1]

fig = plt.figure()
ax = fig.add_axes([.1,.1,1,1])

ax.plot(x,y)
```

```
[<matplotlib.lines.Line2D at 0x1ebd97f0470>]
```



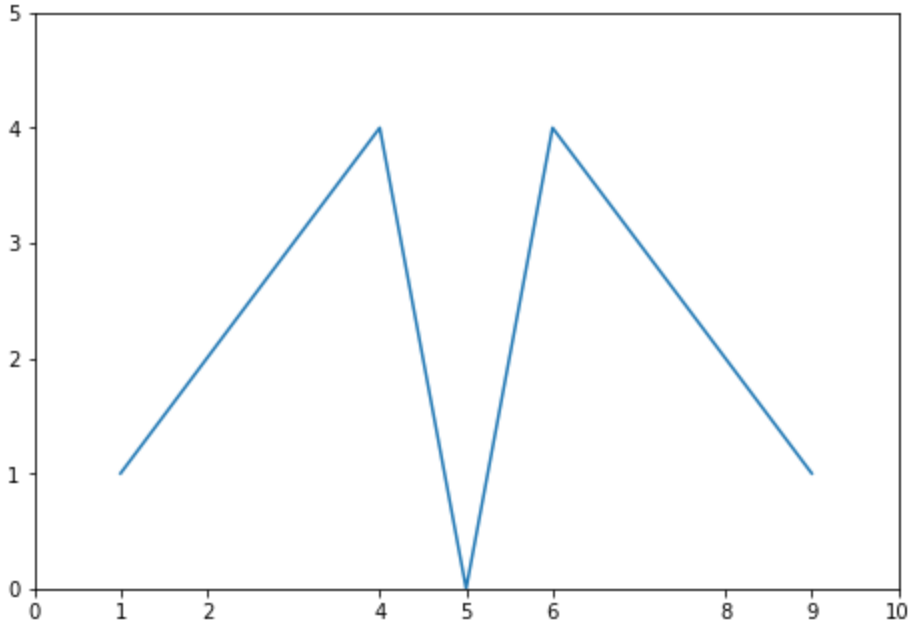

```
fig = plt.figure()
ax = fig.add_axes([.1,.1,1,1])

ax.set_xlim([1,9])
ax.set_ylim([0,5])

ax.set_xticks([0,1,2,4,5,6,8,9,10])
ax.set_yticks([0,1,2,3,4,5])

ax.plot(x,y)
```

```
[<matplotlib.lines.Line2D at 0x1ebd98ca8d0>]
```



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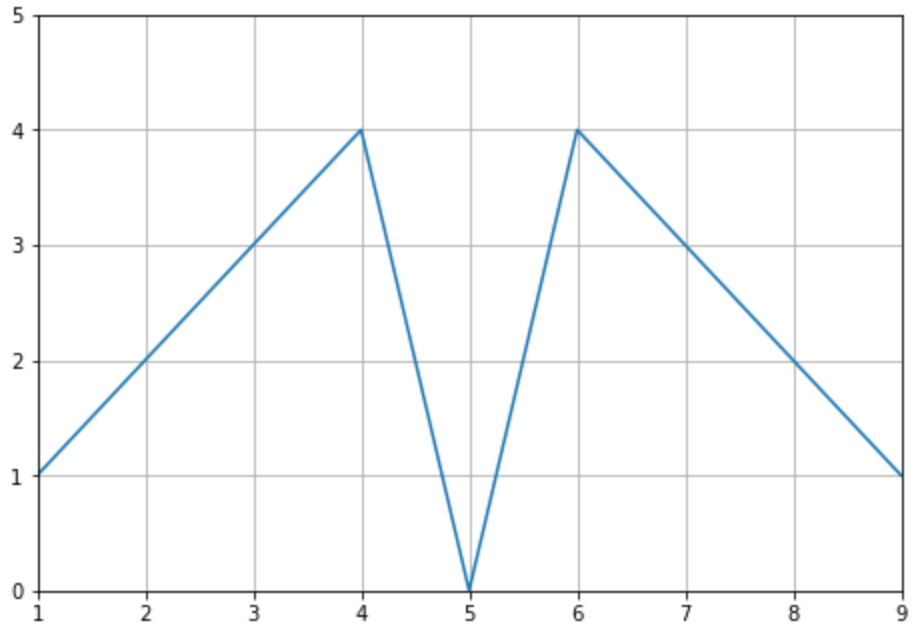
```
fig = plt.figure()
ax = fig.add_axes([.1,.1,1,1])

ax.set_xlim([1,9])
```

```
ax.set_ylim([0,5])

ax.grid()
ax.plot(x,y)
```

```
[<matplotlib.lines.Line2D at 0x1ebd69c3588>]
```



Generating multiple plots in one figure with subplots

```
fig = plt.figure()
fig, (ax1, ax2) = plt.subplots(1,2)

ax1.plot(x)
ax2.plot(x,y)
```

```
[<matplotlib.lines.Line2D at 0x1ebd995e2e8>]
<Figure size 432x288 with 0 Axes>
```