```
Chapter 4 - Practical Data Visualization
Segment 2 - Defining elements of a plot
```

In [5]:
```
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
```

In [10]:
```
%matplotlib inline
rcParams['figure.figsize']= 5,4
```

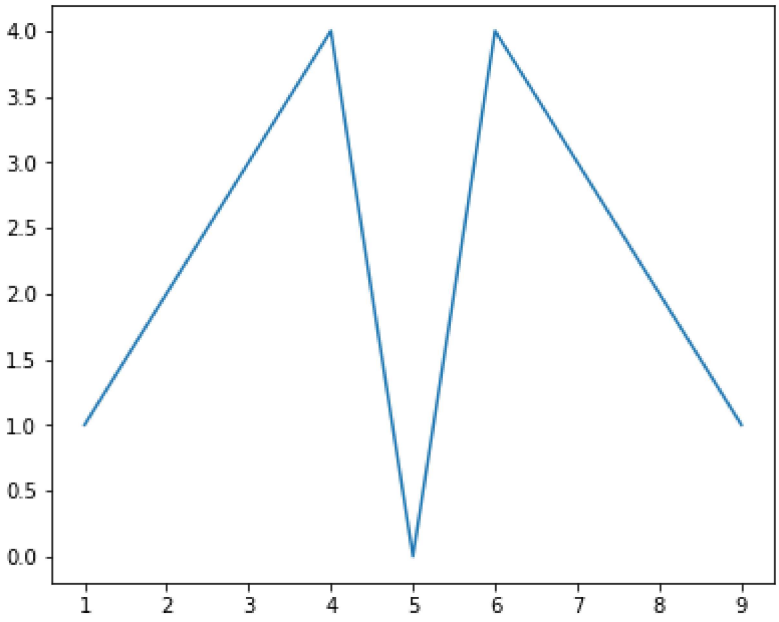
Defining axes, ticks, and grids

In [11]:
```
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)
```

Out[11]:
```
[<matplotlib.lines.Line2D at 0x1eef72cfb48>]
```



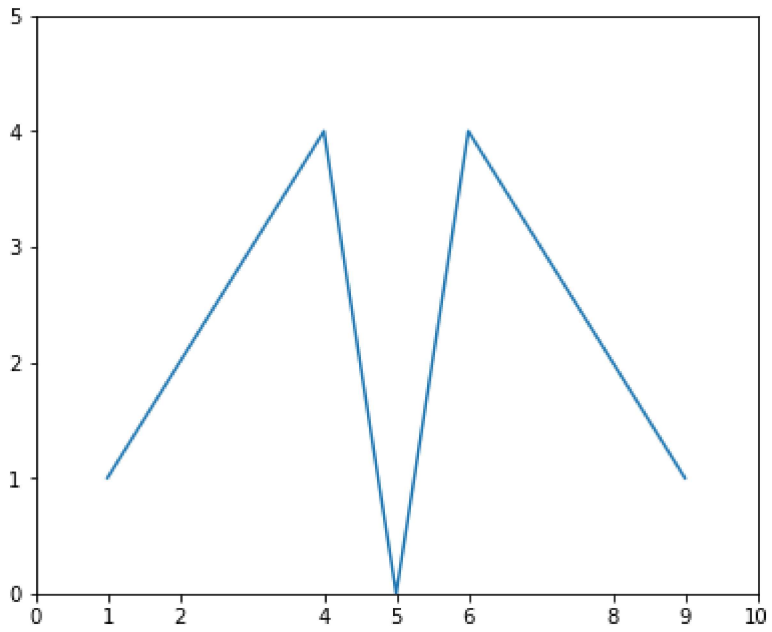
In [12]:
```
fig = plt.figure()
ax = fig.add_axes([.1, .1, 1,1])

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)
```

Out[12]:
```
[<matplotlib.lines.Line2D at 0x1eef73cf588>]
```

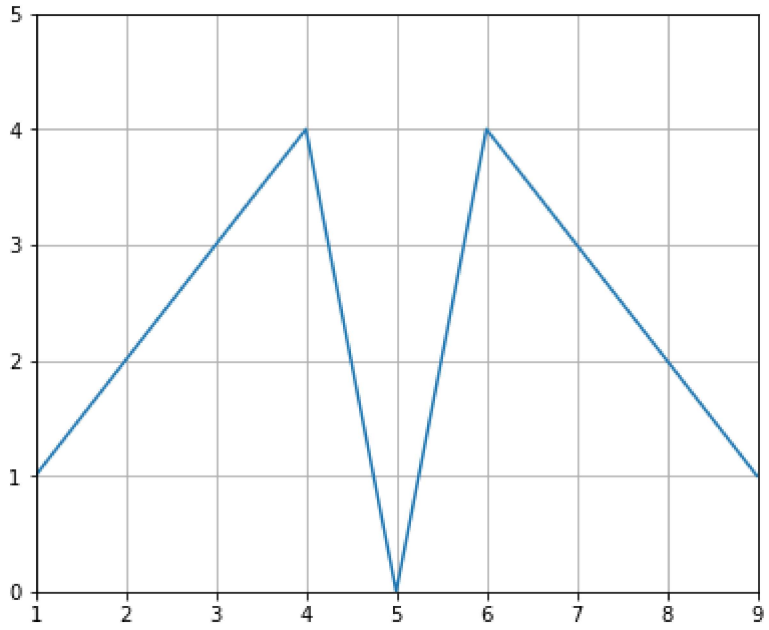


In [13]:
```
fig = plt.figure()
ax = fig.add_axes([.1, .1, 1,1])

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

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

Out[13]:
```
[<matplotlib.lines.Line2D at 0x1eef741cbc8>]
```



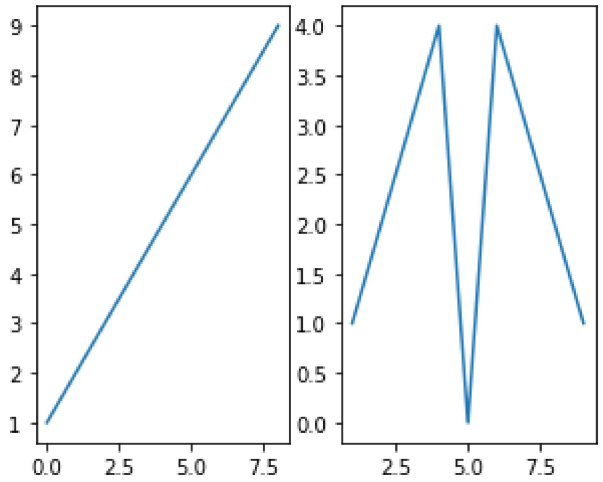

```
Generating multiple plots in one figure with subplots
```

In [14]:
```
fig = plt.figure()
fig, (ax1, ax2) = plt.subplots(1,2)

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

Out[14]:
```
[<matplotlib.lines.Line2D at 0x1eef74c4c08>]

<Figure size 360x288 with 0 Axes>
```



In [ ]:
```

```