In [1]:
```
%matplotlib notebook
# to have interactive plots embedded within the notebook

# %matplotlib inline
# to have static images of your plot embedded in the notebook
```

In [2]:
```
# Matplotlib API functions like plot and close are all in the matplotlib.pyplot mo
dule,
# which is typically imported by convention as:
import matplotlib.pyplot as plt
```

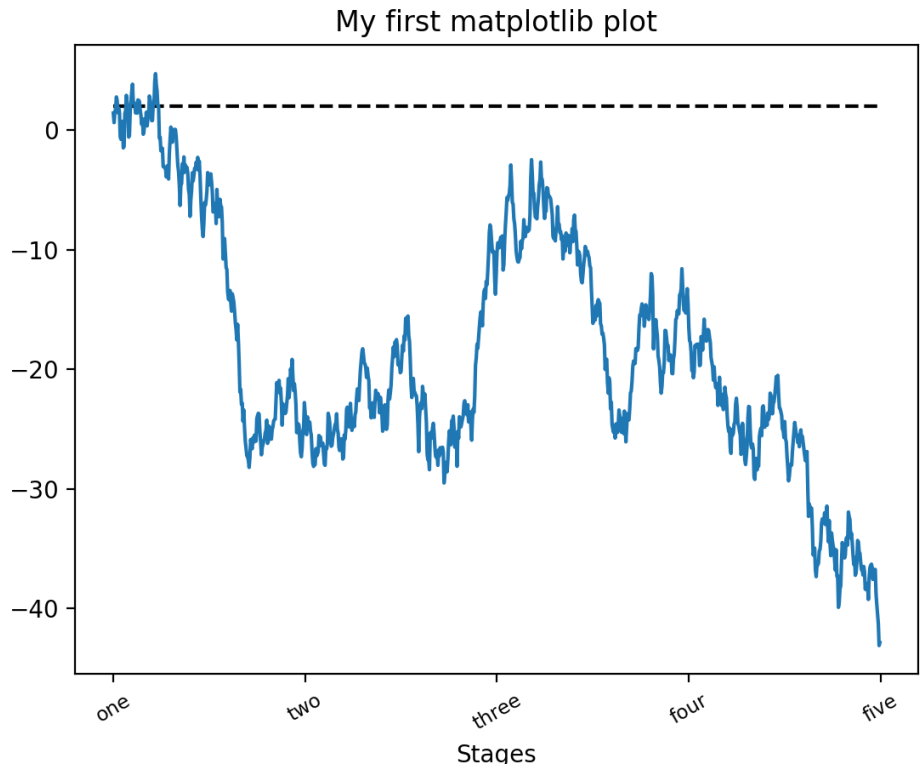
In [3]:
```
from numpy.random import randn
```

In [4]:
```
baseline = []
for x in range(1000):
  baseline.append(2)
```

In [5]:
```
# Plots in matplotlib reside within a Figure object.
fig = plt.figure() # Creates a new figure object.

# You can't make a plot with a blank figure. You have to create one or more subplo
ts.
ax = fig.add_subplot(1, 1, 1) # Creates a subplot that fills the figure and select
s it.

# The plot command draws on the last figure and subplot used, creating one if nece
ssary.
_ = ax.plot(baseline, 'k--') # Explicit version: _ = ax.plot(baseline, linestyle='
--', color='k')
```



In [6]:
```
_ = ax.plot(randn(1000).cumsum())
```

In [7]:
```
x_ticks = ax.set_xticks([0, 250, 500, 750, 1000])
labels = ax.set_xticklabels(['one', 'two', 'three', 'four', 'five'], rotation=30,
fontsize='small')
```

In [8]:
```
_ = ax.set_title('My first matplotlib plot')
```

In [9]:
```
_ = ax.set_xlabel('Stages')
```