

## ▼ Chapter 4 - Practical Data Visualization

### Segment 5 - Visualizing time series

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

```
import matplotlib.pyplot as plt
from pylab import rcParams
```

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

## ▼ The simplest time series plot

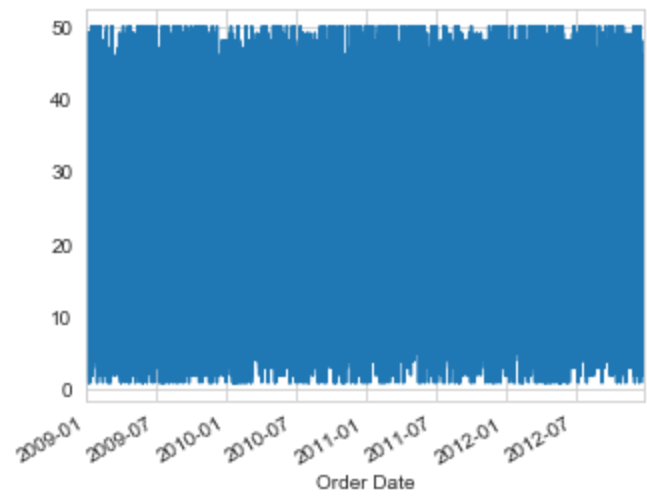
```
address = 'C:/Users/Lillian/Desktop/ExerciseFiles/Data/Superstore-Sales.csv'
```

```
df = pd.read_csv(address, index_col='Order Date', encoding='cp1252', parse_dates=True)
df.head()
```

	Row ID	Order ID	Order Priority	Order Quantity	Sales	Discount	Ship Mode	Profit	Unit Price	Shipping Cost	Customer Name
Order Date											
2010-10-13	1	3	Low	6	261.5400	0.04	Regular Air	-213.25	38.94	35.00	Muhammad MacIntyre
2012-10-01	49	293	High	49	10123.0200	0.07	Delivery Truck	457.81	208.16	68.02	Balraj Fren

```
df['Order Quantity'].plot()
```

<matplotlib.axes.\_subplots.AxesSubplot at 0x27dcce9dd30>



```
df2 = df.sample(n=100, random_state=25, axis=0)
```

```
plt.xlabel('Order Date')
```

```
plt.ylabel('Order Quantity')  
plt.title('Superstore Sales')
```

```
df2['Order Quantity'].plot()
```

 <matplotlib.axes.\_subplots.AxesSubplot at 0x27dce685dd8>

