NETFLIX STOCK ANALYSIS PROJECT

Import Liberaries: Pandas, Numpy, Matplotlib, Seaborn, Plotly

In [12]:

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import plotly.express as px
import plotly.graph_objects as go
from datetime import datetime
```

Import Netflix Stocks Dataset

In [13]:

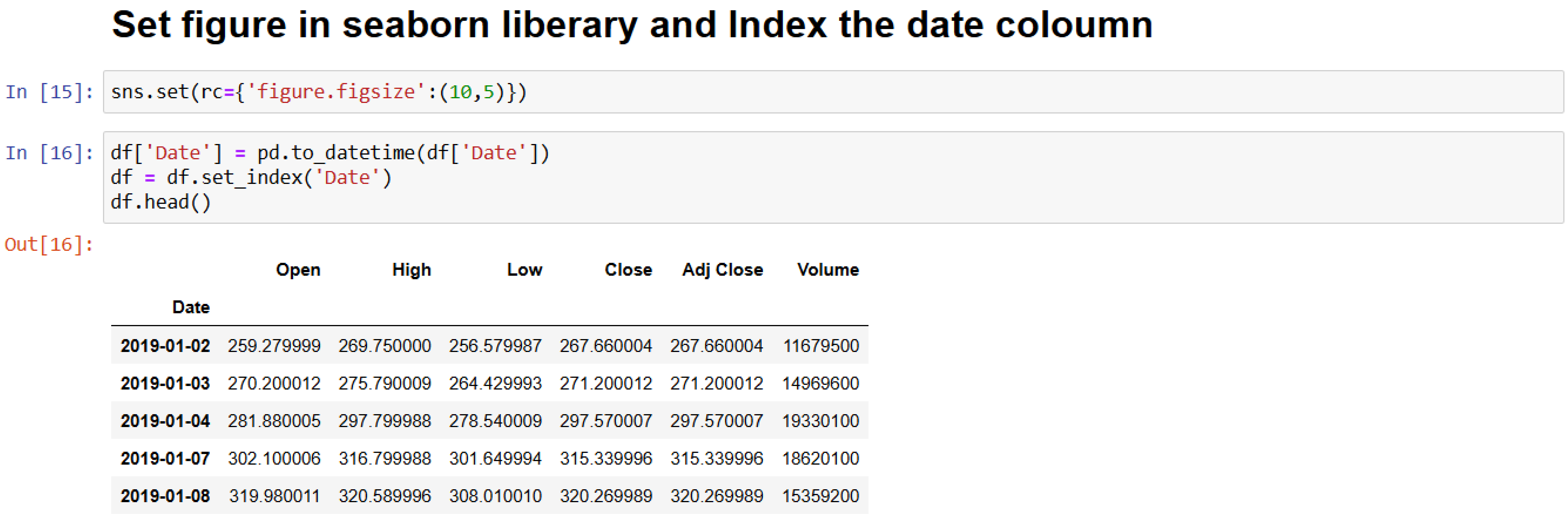
```
df = pd.read_csv("NFLXdaily.csv")
```

In [14]:

```
df.head(5)
```

Out[14]:

	Date	Open	High	Low	Close	Adj Close	Volume
0	2019-01-02	259.279999	269.750000	256.579987	267.660004	267.660004	11679500
1	2019-01-03	270.200012	275.790009	264.429993	271.200012	271.200012	14969600
2	2019-01-04	281.880005	297.799988	278.540009	297.570007	297.570007	19330100
3	2019-01-07	302.100006	316.799988	301.649994	315.339996	315.339996	18620100
4	2019-01-08	319.980011	320.589996	308.010010	320.269989	320.269989	15359200



Set figure in seaborn liberary and Index the date coloumn

```
In [15]: sns.set(rc={'figure.figsize':(10,5)})
```

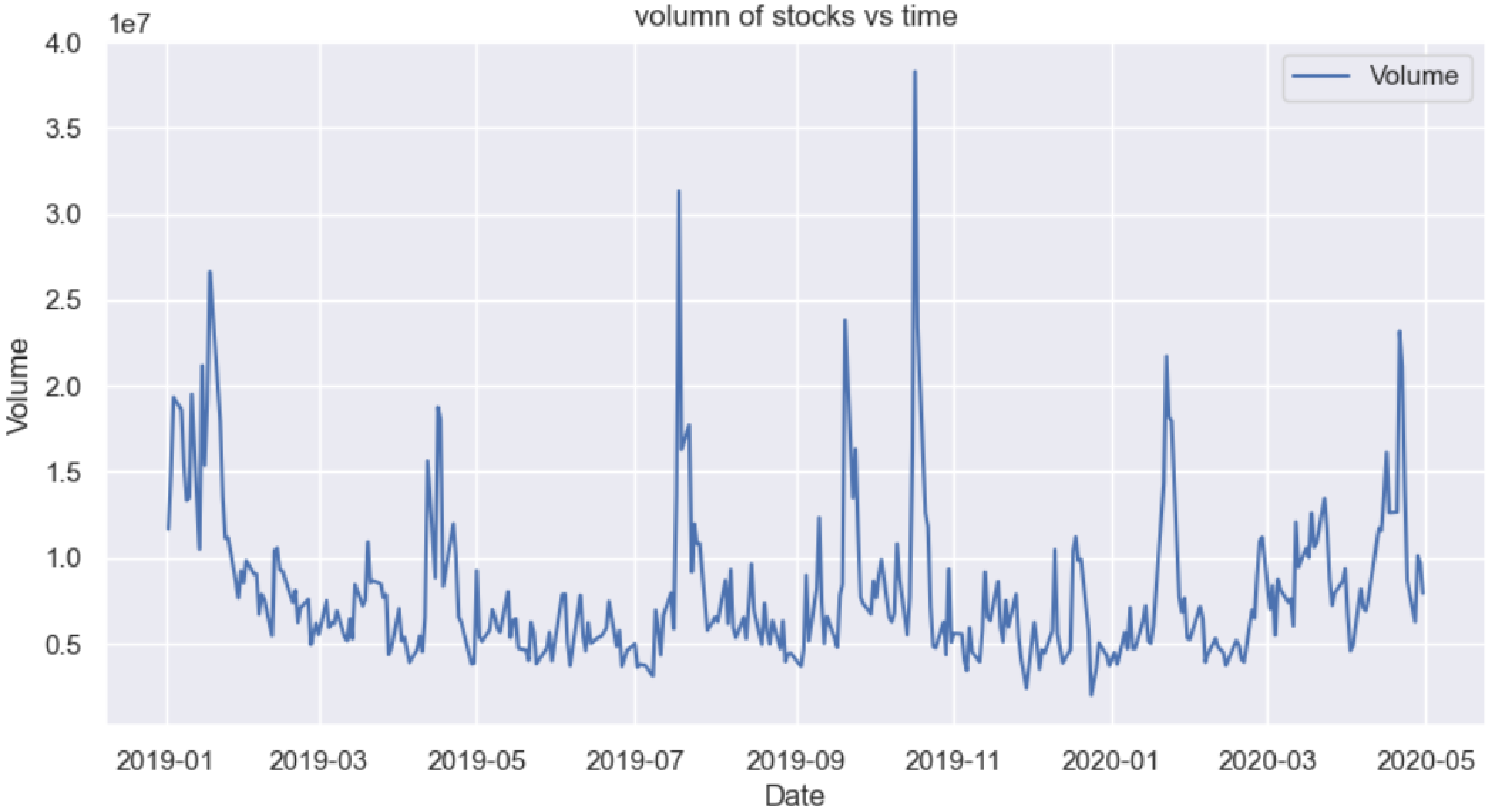
```
In [16]: df['Date'] = pd.to_datetime(df['Date'])
         df = df.set_index('Date')
         df.head()
```

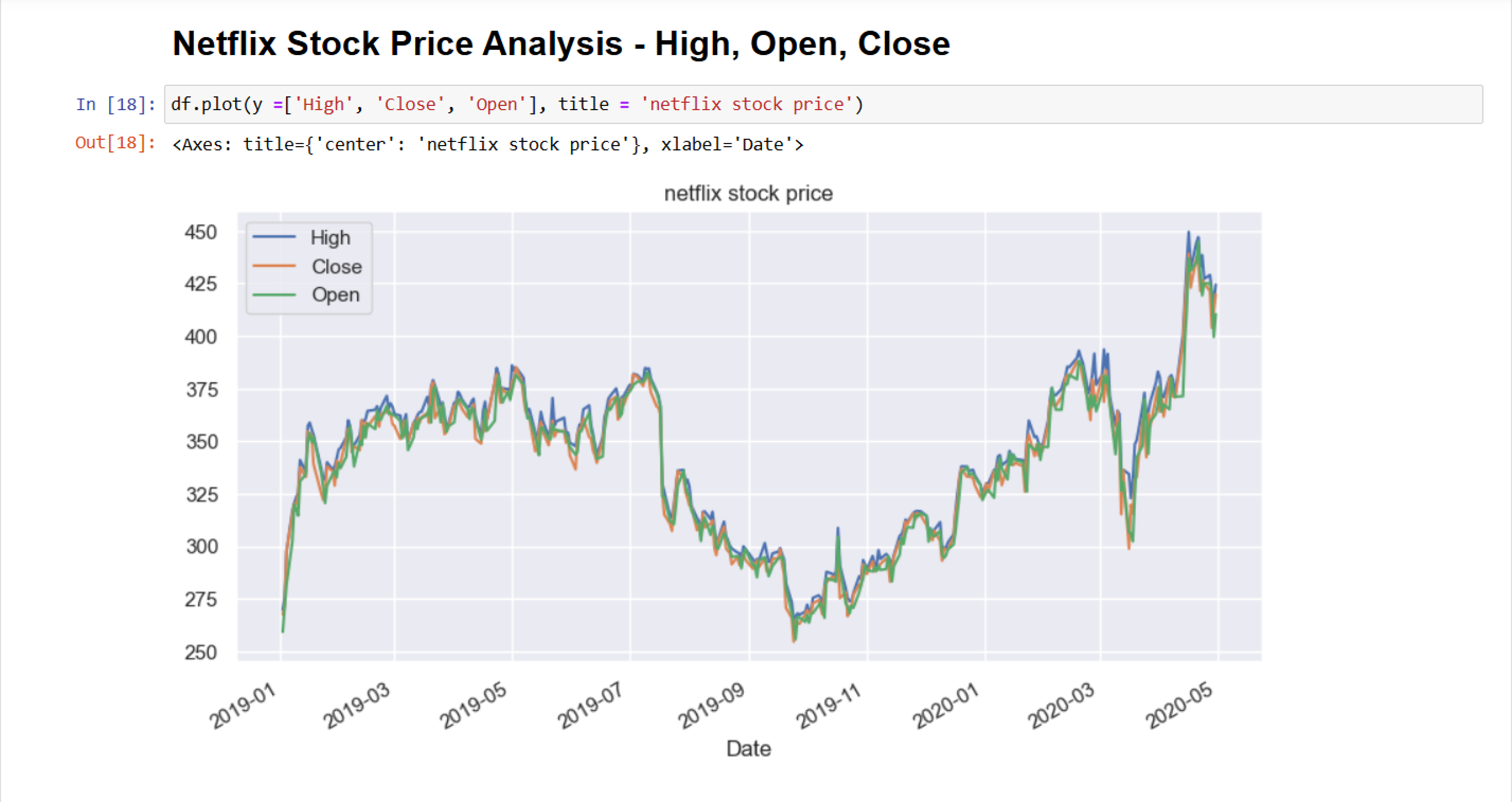
```
Out[16]:
                  Open        High         Low       Close   Adj Close    Volume
      Date
2019-01-02  259.279999  269.750000  256.579987  267.660004  267.660004  11679500
2019-01-03  270.200012  275.790009  264.429993  271.200012  271.200012  14969600
2019-01-04  281.880005  297.799988  278.540009  297.570007  297.570007  19330100
2019-01-07  302.100006  316.799988  301.649994  315.339996  315.339996  18620100
2019-01-08  319.980011  320.589996  308.010010  320.269989  320.269989  15359200
```

Volumn of Stock Trade Analysis by Line Plot

```
In [25]: sns.lineplot(x=df.index, y = df['Volume'], label = 'Volume')
         plt.title('volumn of stocks vs time')
```

```
Out[25]: Text(0.5, 1.0, 'volumn of stocks vs time')
```

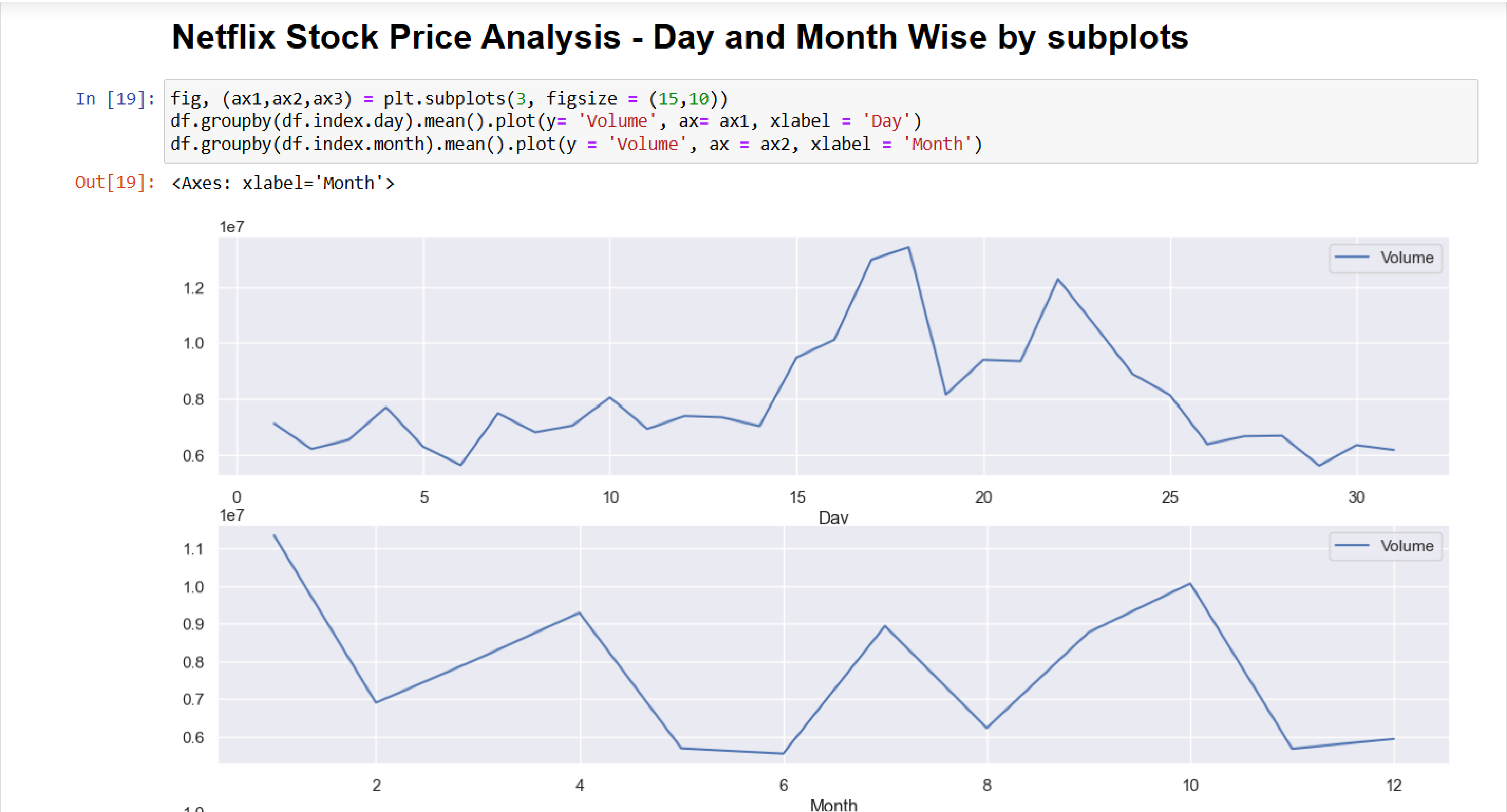




Netflix Stock Price Analysis - High, Open, Close

```
In [18]: df.plot(y =['High', 'Close', 'Open'], title = 'netflix stock price')
```

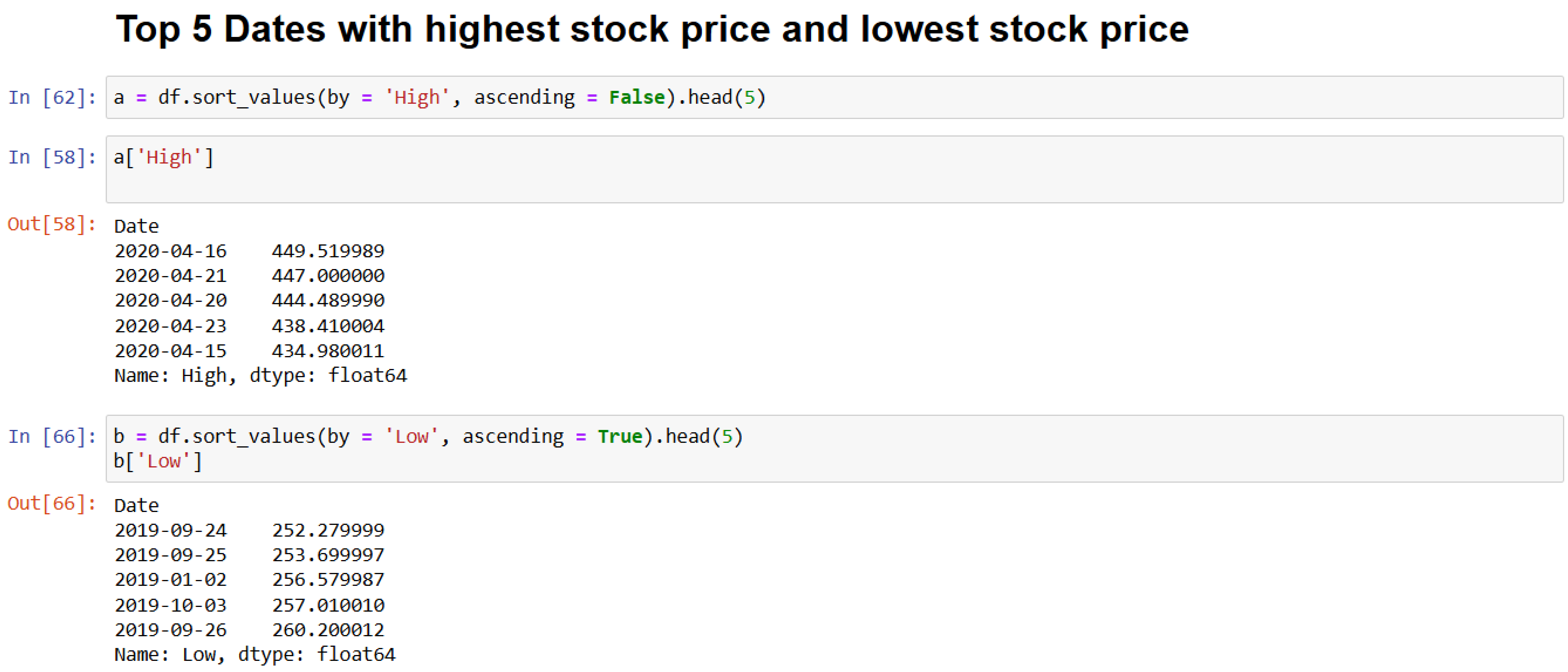
```
Out[18]: <Axes: title={'center': 'netflix stock price'}, xlabel='Date'>
```



Netflix Stock Price Analysis - Day and Month Wise by subplots

```
In [19]: fig, (ax1,ax2,ax3) = plt.subplots(3, figsize = (15,10))
         df.groupby(df.index.day).mean().plot(y= 'Volume', ax= ax1, xlabel = 'Day')
         df.groupby(df.index.month).mean().plot(y = 'Volume', ax = ax2, xlabel = 'Month')
```

```
Out[19]: <Axes: xlabel='Month'>
```



Top 5 Dates with highest stock price and lowest stock price

```
In [62]: a = df.sort_values(by = 'High', ascending = False).head(5)
```

```
In [58]: a['High']
```

```
Out[58]: Date
         2020-04-16    449.519989
         2020-04-21    447.000000
         2020-04-20    444.489990
         2020-04-23    438.410004
         2020-04-15    434.980011
         Name: High, dtype: float64
```

```
In [66]: b = df.sort_values(by = 'Low', ascending = True).head(5)
         b['Low']
```

```
Out[66]: Date
         2019-09-24    252.279999
         2019-09-25    253.699997
         2019-01-02    256.579987
         2019-10-03    257.010010
         2019-09-26    260.200012
         Name: Low, dtype: float64
```

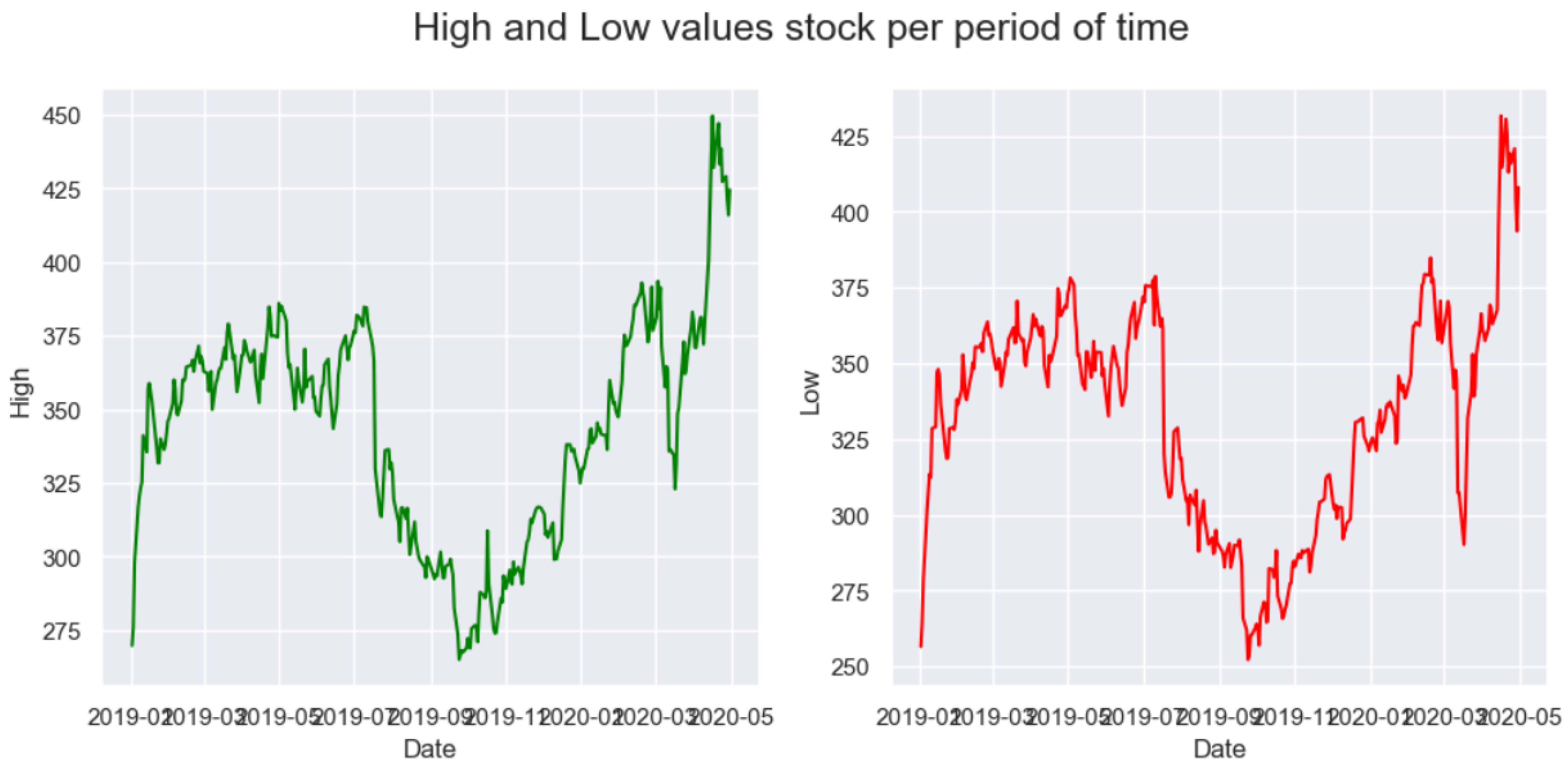
Analysis of high and low stock per period of time by subplots

In [79]:

```
fig,axes = plt.subplots(nrows = 1, ncols= 2, sharex = True, figsize = (12,5))
fig.suptitle("High and Low values stock per period of time", fontsize = 18)
sns.lineplot(ax = axes[0], y= df['High'], x = df.index, color = 'green')
sns.lineplot(ax = axes[1],y = df['Low'], x = df.index, color = 'red')
```

Out[79]:

```
<Axes: xlabel='Date', ylabel='Low'>
```


High and Low values stock per period of time
High
Date
Low
Date