

In [1]: `#NETFLIX STOCK ANALYSIS PROJECT`

In [2]: `import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns

from datetime import datetime`

In [3]: `df = pd.read_csv("Netflix.csv")
df`

Out[3]:

	Date	Open	High	Low	Close	Adj Close	Volume
0	2002-05-23	1.156429	1.242857	1.145714	1.196429	1.196429	104790000
1	2002-05-24	1.214286	1.225000	1.197143	1.210000	1.210000	11104800
2	2002-05-28	1.213571	1.232143	1.157143	1.157143	1.157143	6609400
3	2002-05-29	1.164286	1.164286	1.085714	1.103571	1.103571	6757800
4	2002-05-30	1.107857	1.107857	1.071429	1.071429	1.071429	10154200
...
4869	2021-09-24	592.500000	592.979980	583.640015	592.390015	592.390015	2124800
4870	2021-09-27	587.950012	593.580017	576.929993	592.640015	592.640015	2504700
4871	2021-09-28	589.000000	599.539978	580.159973	583.849976	583.849976	4431100
4872	2021-09-29	589.010010	609.880005	588.010010	599.059998	599.059998	6221000
4873	2021-09-30	608.049988	619.000000	608.049988	610.340027	610.340027	6612600

4874 rows × 7 columns

In [4]: `df.head(15)`

Out[4]:

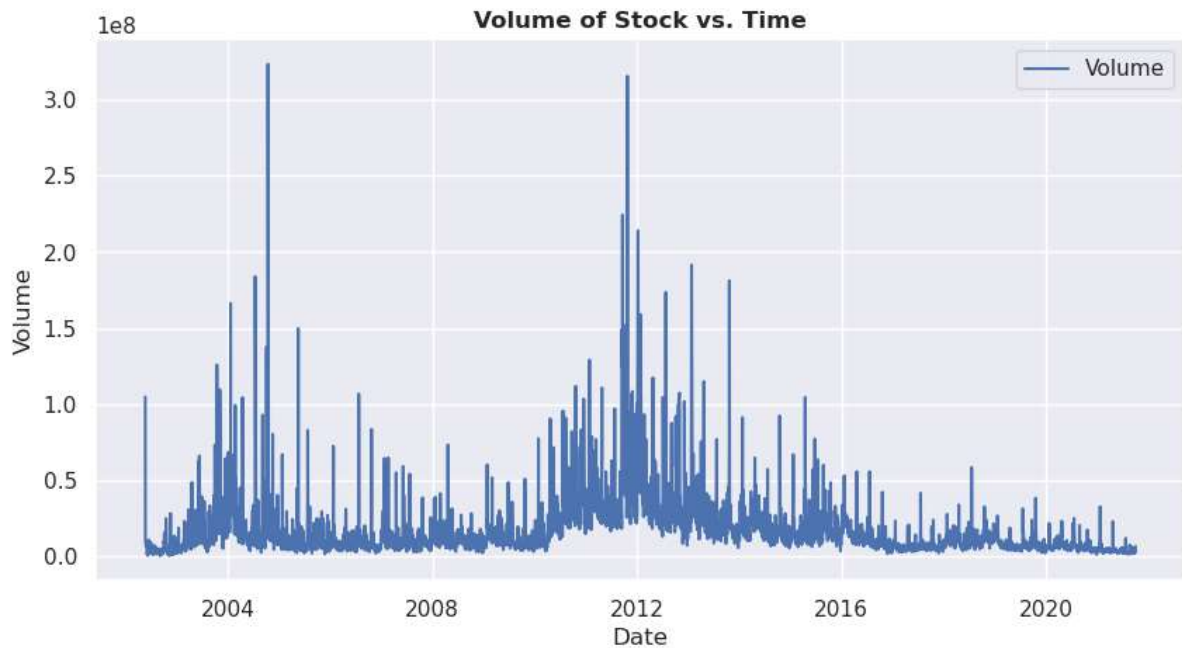
	Date	Open	High	Low	Close	Adj Close	Volume
0	2002-05-23	1.156429	1.242857	1.145714	1.196429	1.196429	104790000
1	2002-05-24	1.214286	1.225000	1.197143	1.210000	1.210000	11104800
2	2002-05-28	1.213571	1.232143	1.157143	1.157143	1.157143	6609400
3	2002-05-29	1.164286	1.164286	1.085714	1.103571	1.103571	6757800
4	2002-05-30	1.107857	1.107857	1.071429	1.071429	1.071429	10154200
5	2002-05-31	1.078571	1.078571	1.071429	1.076429	1.076429	8464400
6	2002-06-03	1.080000	1.149286	1.076429	1.128571	1.128571	3151400
7	2002-06-04	1.135714	1.140000	1.110714	1.117857	1.117857	3105200
8	2002-06-05	1.110714	1.159286	1.107143	1.147143	1.147143	1531600
9	2002-06-06	1.150000	1.232143	1.148571	1.182143	1.182143	2305800
10	2002-06-07	1.177857	1.177857	1.103571	1.118571	1.118571	1369200
11	2002-06-10	1.135000	1.175000	1.134286	1.156429	1.156429	484400
12	2002-06-11	1.156429	1.188571	1.128571	1.153571	1.153571	1003800
13	2002-06-12	1.153571	1.182143	1.089286	1.092857	1.092857	1799000
14	2002-06-13	1.104286	1.122143	1.080000	1.082857	1.082857	2567600

In [5]: `sns.set(rc = {"figure.figsize" : (10,5)})`In [6]: `df['Date'] = pd.to_datetime(df["Date"])
df = df.set_index("Date")
df.head()`

Out[6]:

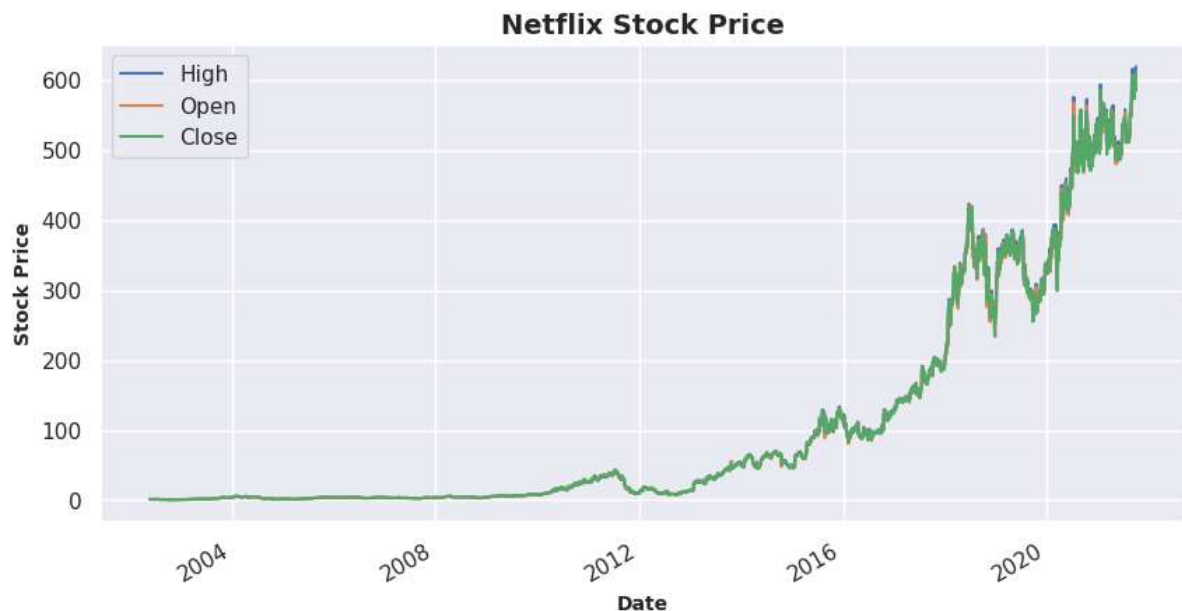
	Open	High	Low	Close	Adj Close	Volume
Date						
2002-05-23	1.156429	1.242857	1.145714	1.196429	1.196429	104790000
2002-05-24	1.214286	1.225000	1.197143	1.210000	1.210000	11104800
2002-05-28	1.213571	1.232143	1.157143	1.157143	1.157143	6609400
2002-05-29	1.164286	1.164286	1.085714	1.103571	1.103571	6757800
2002-05-30	1.107857	1.107857	1.071429	1.071429	1.071429	10154200

In [7]: `#Volume of Stock Traded`In [8]: `sns.lineplot(x = df.index, y = df.Volume, label = "Volume")
plt.title("Volume of Stock vs. Time", fontweight = "bold")
plt.show()`



In [9]: *#Stock Price : High, Open, Close*

```
In [20]: df.plot(y = ["High", "Open", "Close"])
plt.title("Netflix Stock Price", fontweight = 'bold', fontsize = 14)
plt.xlabel("Date", fontweight = 'bold', fontsize = 10)
plt.ylabel("Stock Price", fontweight = 'bold', fontsize = 10)
plt.show()
```

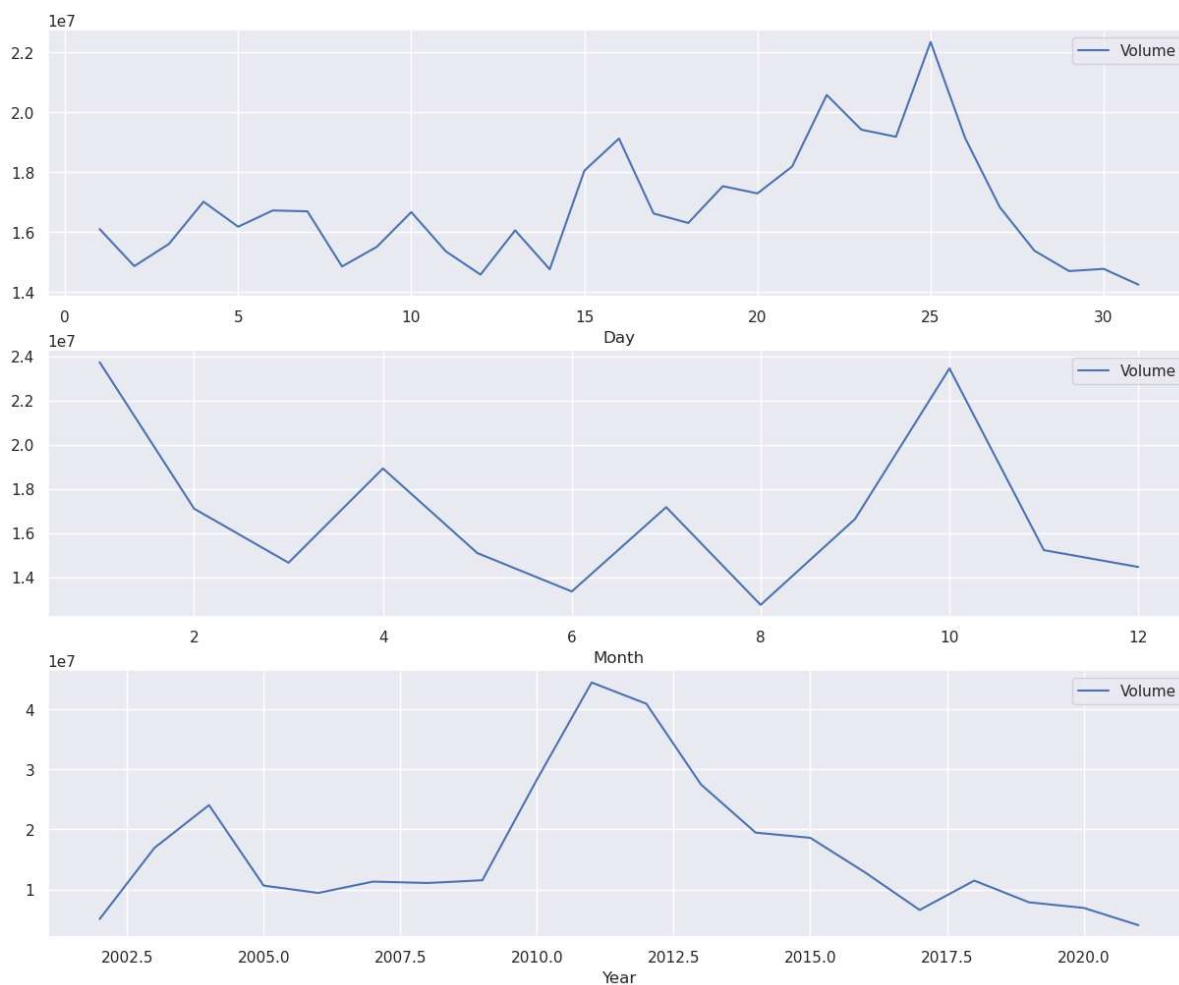


In [21]: *#Stock Price : Day, Month, Yearwise*

```
In [33]: fig, (ax1, ax2, ax3) = plt.subplots(3, figsize = (15,12))

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")
df.groupby(df.index.year).mean().plot(y = "Volume", ax = ax3, xlabel = "Year")
```

```
plt.show()
```



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In [34]: #Top 5 Dates with Highest Stock Price
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```
In [41]: a = df.sort_values(by = "High", ascending = False).head(5)
a['High']
```

```
Out[41]: Date
2021-09-30    619.000000
2021-09-08    615.599976
2021-09-07    613.849976
2021-09-29    609.880005
2021-09-10    609.450012
Name: High, dtype: float64
```

```
In [ ]: #Top 5 Dates with Lowest Stock Price
```

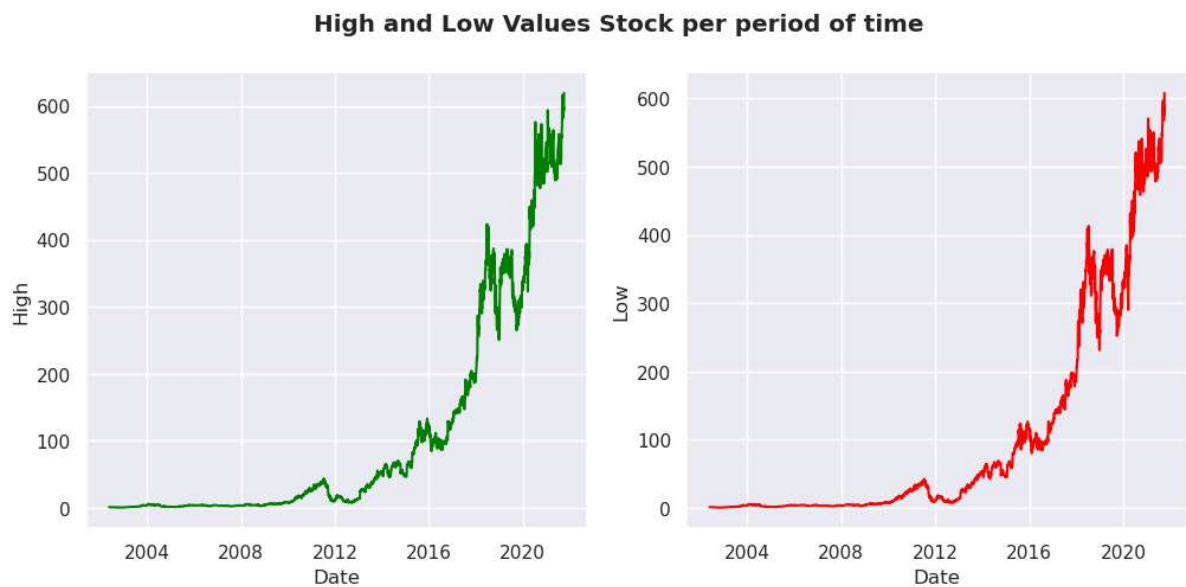
```
In [40]: b = df.sort_values(by = "Low").head(5)
b['Low']
```

```
Out[40]: Date
2002-10-10    0.346429
2002-10-09    0.347143
2002-10-07    0.382143
2002-10-08    0.390714
2002-10-16    0.442857
Name: Low, dtype: float64
```

```
In [ ]: #Trendline showing High and Low Stock per period of time
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```
In [46]: fig, axes = plt.subplots(nrows = 1, ncols = 2, sharex = True, figsize = (12,5))
fig.suptitle("High and Low Values Stock per period of time", fontweight = "bold")
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[46]: <AxesSubplot: xlabel='Date', ylabel='Low'>
```



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In [ ]:
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