NETFLIX STOCK ANALYSIS PROJECT

In [17]:
```python
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
from datetime import datetime
import plotly.express as px
```

In [18]:
```python
df=pd.read_csv(r"C:\Users\alamm\Downloads\Netflix.csv")
```

In [19]:
```python
df
```

Out[19]:

	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 [20]:
```python
df.head()
```

Out[20]:

	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

In [30]:
```python
sns.set(rc={'figure.figsize':(10,5)})
```

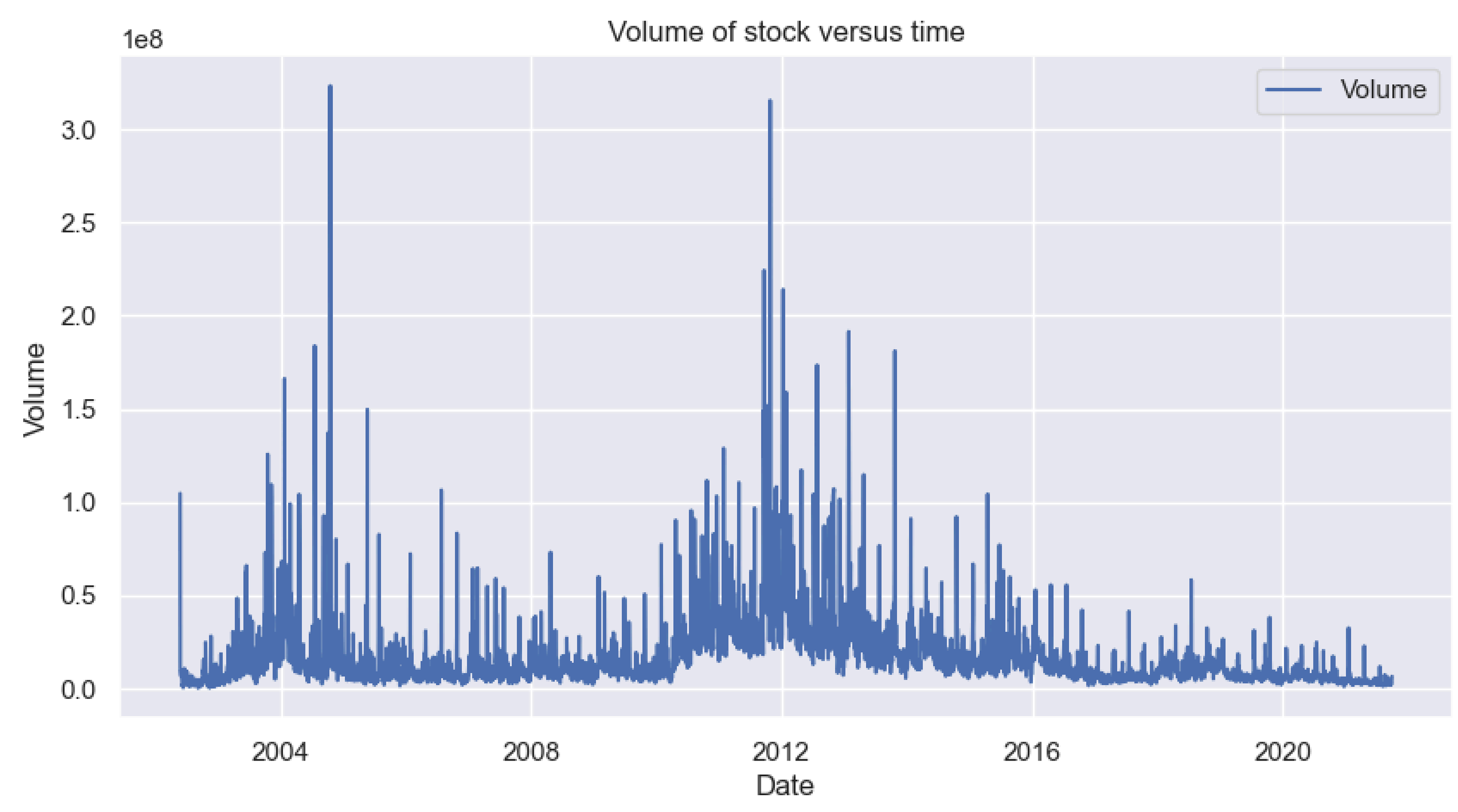
In [34]:
```python
# df['Date']=pd.to_datetime(df['Date'])
df.set_index("Date",inplace=True)
df.head()
```

Out[34]:

	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

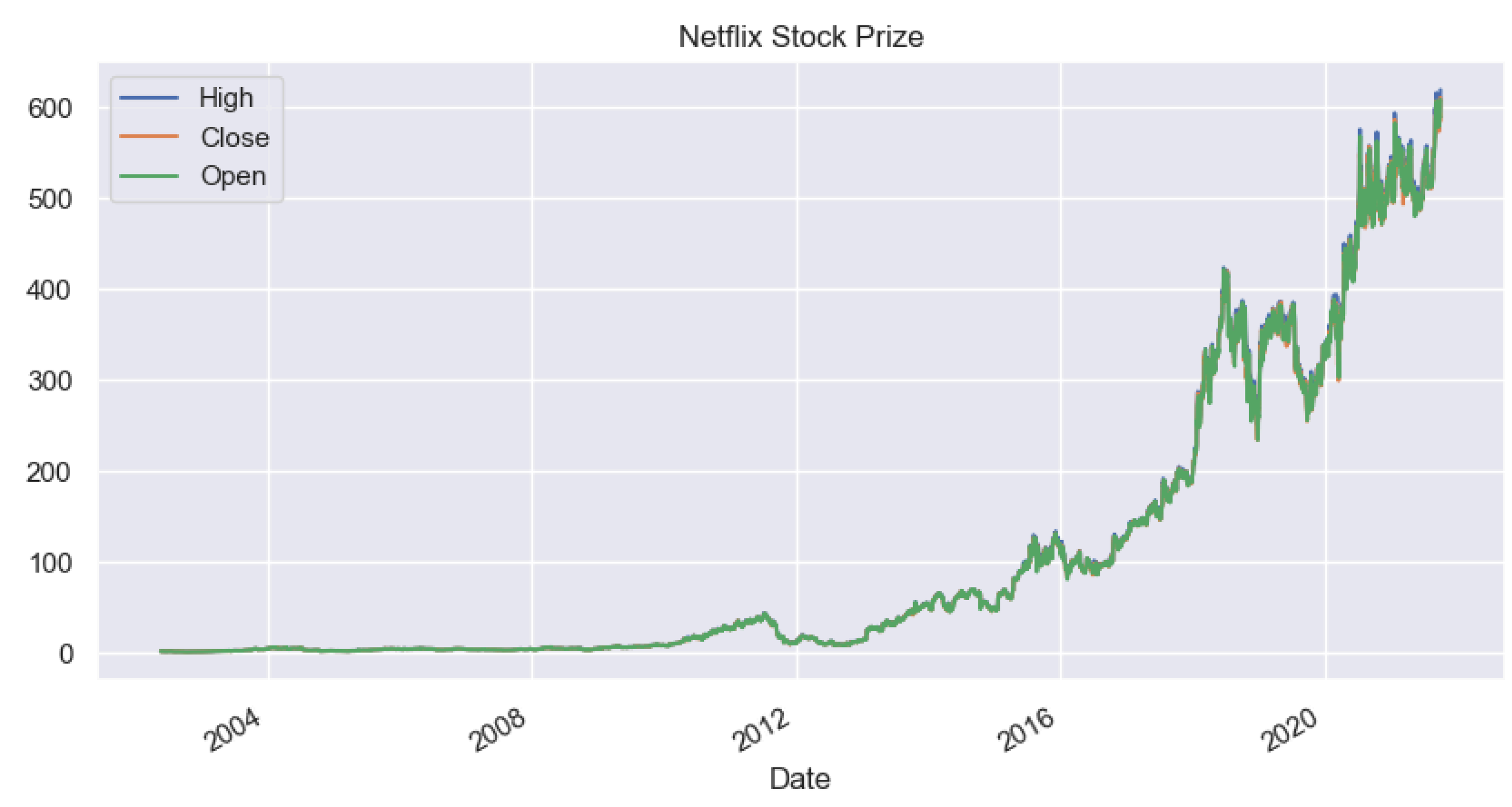
In [37]:
```python
sns.lineplot(x=df.index,y=df['Volume'],label='Volume')
plt.title('Volume of stock versus time')
```

Out[37]:
```
Text(0.5, 1.0, 'Volume of stock versus time')
```



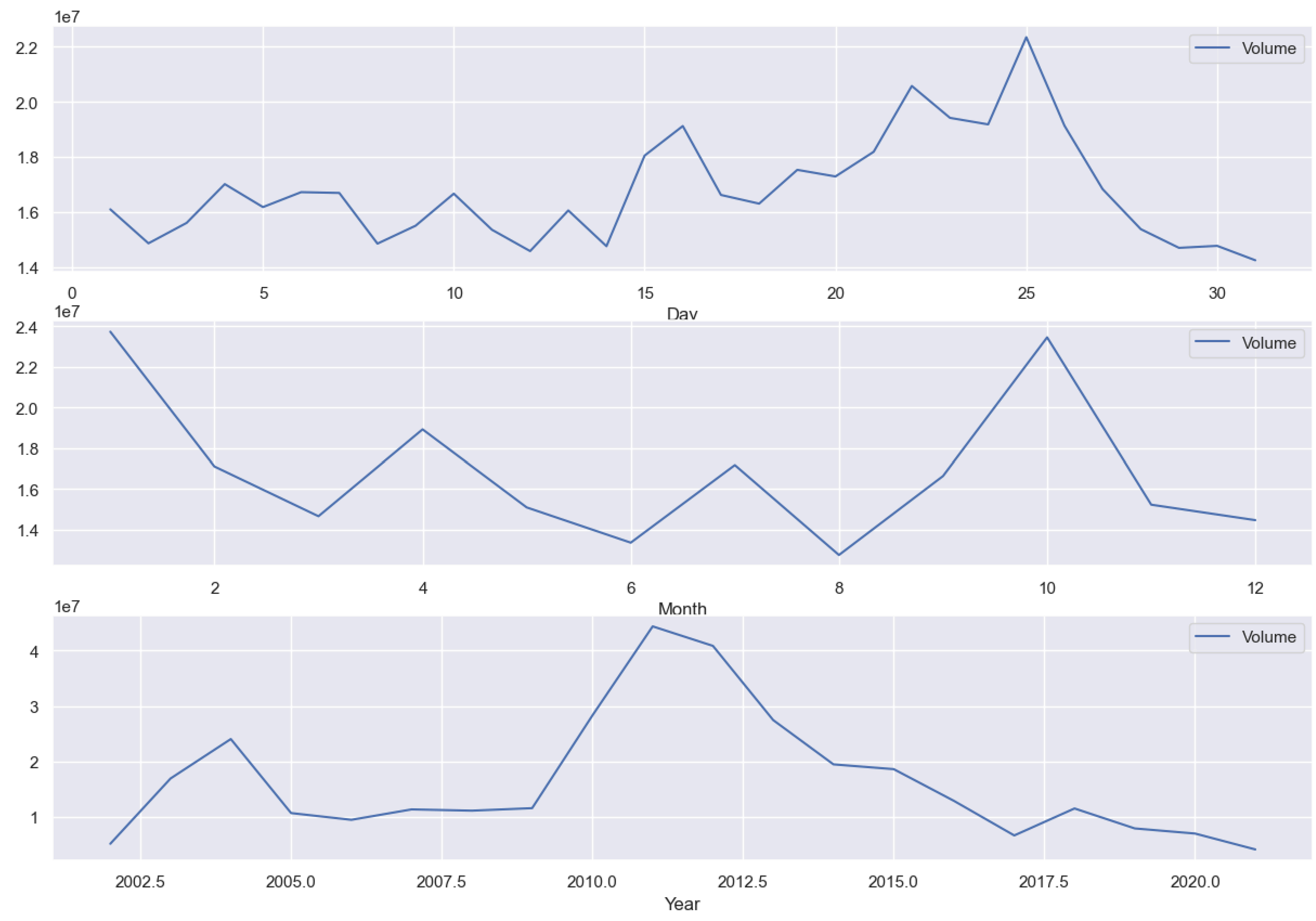
In [38]:
```python
df.plot(y=['High','Close','Open'],title='Netflix Stock Prize')
```

Out[38]:
```
<Axes: title={'center': 'Netflix Stock Prize'}, xlabel='Date'>
```



In [42]:
```python
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')
df.groupby(df.index.year).mean().plot(y='Volume',ax=ax3,xlabel='Year')
```

Out[42]:
```
<Axes: xlabel='Year'>
```



In [45]:
```python
a=df.sort_values(by='High',ascending=False).head(5)
a['High']
```

Out[45]:
```
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
```

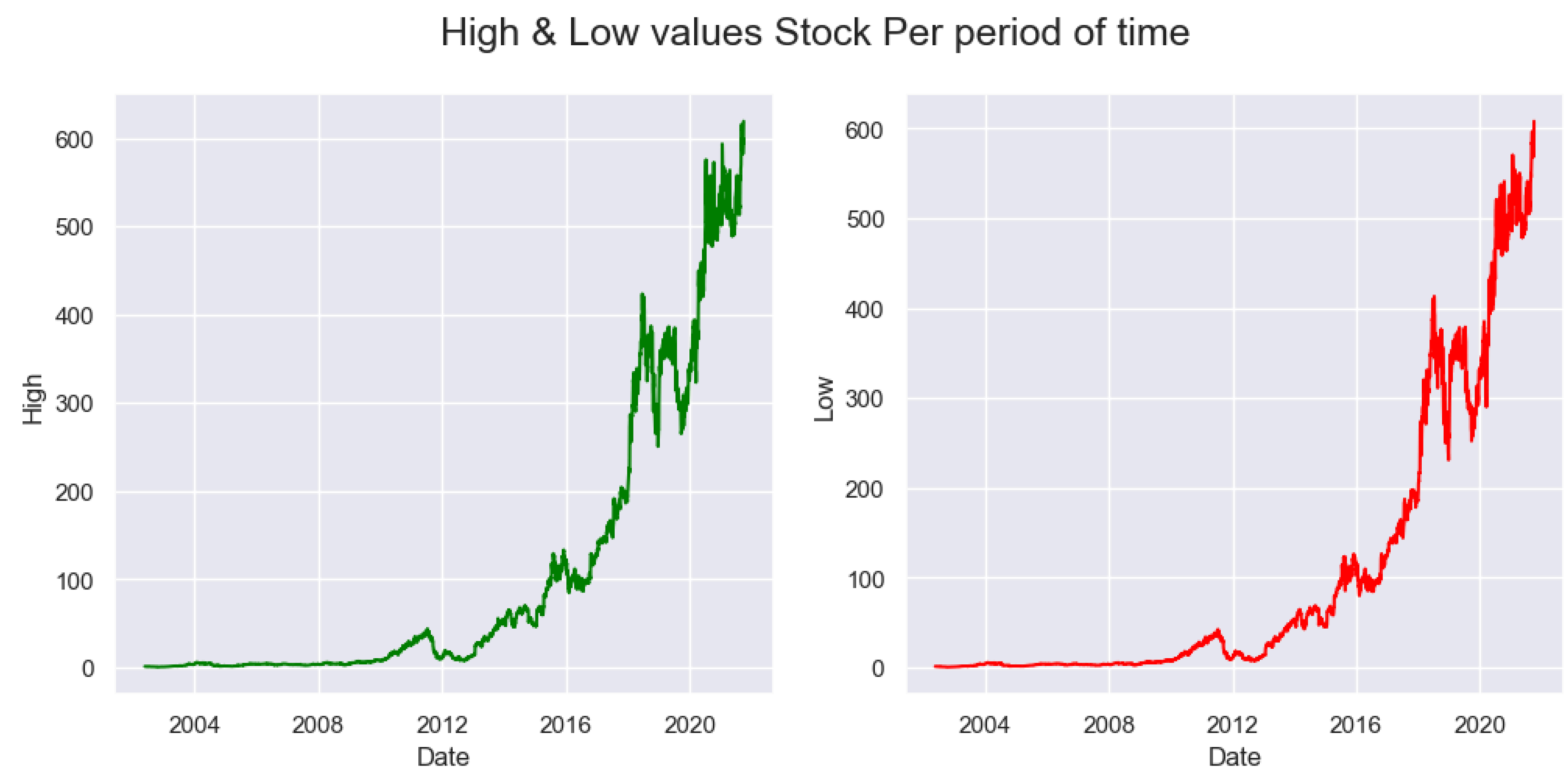
In [54]:
```python
b=px.scatter(df,x=df.index.year,y='High',)
b.show()
```

In [56]:
```python
a=df.sort_values(by='Low',ascending=True).head(5)
a['Low']
```

Out[56]:
```
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 [61]:
```python
fig,axes=plt.subplots(nrows=1,ncols=2,sharex=True,figsize=(12,5))
fig.suptitle('High & 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[61]:
```
<Axes: xlabel='Date', ylabel='Low'>
```



In [ ]: