

Tesla DataSet : This dataset is going to give you a better perspective of the price of Tesla Stock

```
In [1]: # this is a picture of a tesla vehicle
from IPython import display
display.Image("/home/harlohutch77/gif/tesla.jpeg")
```



```
In [4]: !date

Sun 25 Sep 2022 04:25:09 PM EDT
```

```
In [1]: #imports so this project is possible
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import cufflinks as cf
%matplotlib inline
```

```
In [2]: #reading the tesla csv file and putting the data into a dataframe
tesla = pd.read_csv("/home/harlohutch77/python/python_master/TSLA.csv")
tesla
```

	Date	High	Low	Open	Close	Volume	Adj Close
0	2019-09-30	48.796001	47.222000	48.599998	48.174000	29399000.0	48.174000
1	2019-10-01	49.189999	47.826000	48.299999	48.938000	30813000.0	48.938000
2	2019-10-02	48.930000	47.886002	48.658001	48.625999	28157000.0	48.625999
3	2019-10-03	46.896000	44.855999	46.372002	46.605999	75422500.0	46.605999
4	2019-10-04	46.956001	45.613998	46.321999	46.285999	39975000.0	46.285999
...
634	2022-04-05	1152.869995	1087.300049	1136.300049	1091.260010	26691700.0	1091.260010
635	2022-04-06	1079.000000	1027.699951	1073.469971	1045.760010	29782800.0	1045.760010
636	2022-04-07	1076.589966	1021.539978	1052.390015	1057.260010	26482400.0	1057.260010
637	2022-04-08	1048.439941	1022.440002	1043.209961	1025.489990	18293300.0	1025.489990
638	2022-04-11	1008.469971	974.640015	980.400024	975.929993	19660500.0	975.929993

639 rows × 7 columns

```
In [3]: #this dataframe is showing data that is obtained from the top rows of the dataset
tesla.head()
```

	Date	High	Low	Open	Close	Volume	Adj Close
0	2019-09-30	48.796001	47.222000	48.599998	48.174000	29399000.0	48.174000
1	2019-10-01	49.189999	47.826000	48.299999	48.938000	30813000.0	48.938000
2	2019-10-02	48.930000	47.886002	48.658001	48.625999	28157000.0	48.625999
3	2019-10-03	46.896000	44.855999	46.372002	46.605999	75422500.0	46.605999
4	2019-10-04	46.956001	45.613998	46.321999	46.285999	39975000.0	46.285999

```
In [4]: #this dataframe is showing data that is from the bottom rows of the dataset
tesla.tail()
```

	Date	High	Low	Open	Close	Volume	Adj Close
634	2022-04-05	1152.869995	1087.300049	1136.300049	1091.260010	26691700.0	1091.260010
635	2022-04-06	1079.000000	1027.699951	1073.469971	1045.760010	29782800.0	1045.760010
636	2022-04-07	1076.589966	1021.539978	1052.390015	1057.260010	26482400.0	1057.260010
637	2022-04-08	1048.439941	1022.440002	1043.209961	1025.489990	18293300.0	1025.489990
638	2022-04-11	1008.469971	974.640015	980.400024	975.929993	19660500.0	975.929993

```
In [8]: # this information below is to import and make the visualizations possible in this project
from plotly import __version__
from plotly.offline import download_plotlyjs, init_notebook_mode, plot, iplot

print(__version__) # requires version >= 1.9.0

import cufflinks as cf

init_notebook_mode(connected=True)

cf.go_offline()

5.7.0
```

```
In [10]: #this line of code is specifying the High and Low data from the dataset to give you a better perspective of
#what is transpiring with Tesla's stock
tesla[['High','Low']].iplot(kind='ratio', title='Tesla_Stock')
```



```
In [11]: #this line of code is also giving you a better perspective of the data given from the dataset in a different
#visualization
import plotly.express as px
fig = px.line(tesla, x="Date", y="Adj Close",title = 'Tesla Stock')
fig.show()
```

