In [29]:
```
!pip install yfinance
!pip install plotly
!pip install bs4
!pip install requests
!pip install pandas
```

```
Requirement already satisfied: yfinance in c:\users\at\anaconda3\lib\site-packages (0.2.31)
Requirement already satisfied: requests>=2.31 in c:\users\at\anaconda3\lib\site-packages (from yfinance) (2.31.0)
Requirement already satisfied: appdirs>=1.4.4 in c:\users\at\anaconda3\lib\site-packages (from yfinance) (1.4.4)
Requirement already satisfied: pandas>=1.3.0 in c:\users\at\anaconda3\lib\site-packages (from yfinance) (1.4.2)
Requirement already satisfied: html5lib>=1.1 in c:\users\at\anaconda3\lib\site-packages (from yfinance) (1.1)
Requirement already satisfied: lxml>=4.9.1 in c:\users\at\anaconda3\lib\site-packages (from yfinance) (4.9.3)
Requirement already satisfied: peewee>=3.16.2 in c:\users\at\anaconda3\lib\site-packages (from yfinance) (3.16.3)
Requirement already satisfied: pytz>=2022.5 in c:\users\at\anaconda3\lib\site-packages (from yfinance) (2023.3.post1)
Requirement already satisfied: numpy>=1.16.5 in c:\users\at\anaconda3\lib\site-packages (from yfinance) (1.21.5)
Requirement already satisfied: beautifulsoup4>=4.11.1 in c:\users\at\anaconda3\lib\site-packages (from yfinance) (4.11.1)
Requirement already satisfied: frozendict>=2.3.4 in c:\users\at\anaconda3\lib\site-packages (from yfinance) (2.3.8)
Requirement already satisfied: multitasking>=0.0.7 in c:\users\at\anaconda3\lib\site-packages (from yfinance) (0.0.11)
Requirement already satisfied: soupsieve>1.2 in c:\users\at\anaconda3\lib\site-packages (from beautifulsoup4>=4.11.1->yfinance) (2.3.1)
Requirement already satisfied: webencodings in c:\users\at\anaconda3\lib\site-packages (from html5lib>=1.1->yfinance) (0.5.1)
Requirement already satisfied: six>=1.9 in c:\users\at\anaconda3\lib\site-packages (from html5lib>=1.1->yfinance) (1.16.0)
Requirement already satisfied: python-dateutil>=2.8.1 in c:\users\at\anaconda3\lib\site-packages (from pandas>=1.3.0->yfinance) (2.8.2)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\at\anaconda3\lib\site-packages (from requests>=2.31->yfinance) (2021.10.8)
Requirement already satisfied: urllib3<3,>=1.21.1 in c:\users\at\anaconda3\lib\site-packages (from requests>=2.31->yfinance) (1.26.9)
Requirement already satisfied: charset-normalizer<4,>=2 in c:\users\at\anaconda3\lib\site-packages (from requests>=2.31->yfinance) (2.0.4)
Requirement already satisfied: idna<4,>=2.5 in c:\users\at\anaconda3\lib\site-packages (from requests>=2.31->yfinance) (3.3)
Requirement already satisfied: plotly in c:\users\at\anaconda3\lib\site-packages (5.6.0)
Requirement already satisfied: tenacity>=6.2.0 in c:\users\at\anaconda3\lib\site-packages (from plotly) (8.0.1)
Requirement already satisfied: six in c:\users\at\anaconda3\lib\site-packages (from plotly) (1.16.0)
Requirement already satisfied: bs4 in c:\users\at\anaconda3\lib\site-packages (0.0.1)
Requirement already satisfied: beautifulsoup4 in c:\users\at\anaconda3\lib\site-packages (from bs4) (4.11.1)
Requirement already satisfied: soupsieve>1.2 in c:\users\at\anaconda3\lib\site-packages (from beautifulsoup4->bs4) (2.3.1)
Requirement already satisfied: requests in c:\users\at\anaconda3\lib\site-packages (2.31.0)
Requirement already satisfied: idna<4,>=2.5 in c:\users\at\anaconda3\lib\site-packages (from requests) (3.3)
Requirement already satisfied: charset-normalizer<4,>=2 in c:\users\at\anaconda3\lib\site-packages (from requests) (2.0.4)
Requirement already satisfied: urllib3<3,>=1.21.1 in c:\users\at\anaconda3\lib\site-packages (from requests) (1.26.9)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\at\anaconda3\lib\site-packages (from requests) (2021.10.8)
Requirement already satisfied: pandas in c:\users\at\anaconda3\lib\site-packages (1.4.2)
Requirement already satisfied: python-dateutil>=2.8.1 in c:\users\at\anaconda3\lib\site-packages (from pandas) (2.8.2)
Requirement already satisfied: pytz>=2020.1 in c:\users\at\anaconda3\lib\site-packages (from pandas) (2023.3.post1)
Requirement already satisfied: numpy>=1.18.5 in c:\users\at\anaconda3\lib\site-packages (from pandas) (1.21.5)
Requirement already satisfied: six>=1.5 in c:\users\at\anaconda3\lib\site-packages (from python-dateutil>=2.8.1->pandas) (1.16.0)
```

In [3]:
```
import yfinance as yf
import pandas as pd
import requests
from bs4 import BeautifulSoup
import plotly.graph_objects as go
from plotly.subplots import make_subplots
```

Question 1

In [4]:
```
tesla = yf.Ticker('TSLA')
```

In [5]:
```
tesla_data = tesla.history(period="max")
```

In [6]:
```
tesla_data.reset_index(inplace=True)
tesla_data.head()
```

Out[6]:

	Date	Open	High	Low	Close	Volume	Dividends	Stock Splits
0	2010-06-29 00:00:00-04:00	1.266667	1.666667	1.169333	1.592667	281494500	0.0	0.0
1	2010-06-30 00:00:00-04:00	1.719333	2.028000	1.553333	1.588667	257806500	0.0	0.0
2	2010-07-01 00:00:00-04:00	1.666667	1.728000	1.351333	1.464000	123282000	0.0	0.0
3	2010-07-02 00:00:00-04:00	1.533333	1.540000	1.247333	1.280000	77097000	0.0	0.0
4	2010-07-06 00:00:00-04:00	1.333333	1.333333	1.055333	1.074000	103003500	0.0	0.0

Question 2

In [40]:
```
url = 'https://www.macrotrends.net/stocks/charts/TSLA/tesla/revenue'
html_data = requests.get(url).text
soup = BeautifulSoup(html_data,"html5lib")
```

In [41]:
```
tesla_revenue = pd.DataFrame(columns=['Date', 'Revenue'])

for table in soup.find_all('table'):

    if ('Tesla Quarterly Revenue' in table.find('th').text):
        rows = table.find_all('tr')

        for row in rows:
            col = row.find_all('td')

            if col != []:
                date = col[0].text
                revenue = col[1].text.replace(',','').replace('$','')

                tesla_revenue = tesla_revenue.append({"Date":date, "Revenue":revenue}, ignore_index=True)
tesla_revenue
```

Out[41]:

	Date	Revenue

In [42]:
```
tesla_revenue = tesla_revenue[tesla_revenue['Revenue'].astype(bool)]
tesla_revenue.tail()
```

Out[42]:

	Date	Revenue

Question 3

In [33]:
```
gme = yf.Ticker('GME')
gme_data = gme.history(period='max')
gme_data.reset_index(inplace=True)
gme_data.head()
```

Out[33]:

	Date	Open	High	Low	Close	Volume	Dividends	Stock Splits
0	2002-02-13 00:00:00-05:00	1.620128	1.693350	1.603296	1.691667	76216000	0.0	0.0
1	2002-02-14 00:00:00-05:00	1.712707	1.716073	1.670626	1.683250	11021600	0.0	0.0
2	2002-02-15 00:00:00-05:00	1.683250	1.687458	1.658002	1.674834	8389600	0.0	0.0
3	2002-02-19 00:00:00-05:00	1.666418	1.666418	1.578047	1.607504	7410400	0.0	0.0
4	2002-02-20 00:00:00-05:00	1.615920	1.662210	1.603296	1.662210	6892800	0.0	0.0

Question 4

In [22]:
```
url = 'https://www.macrotrends.net/stocks/charts/GME/gamestop/revenue'
html_data = requests.get(url).text
```

In [23]:
```
soup = BeautifulSoup(html_data,"html5lib")
```

In [24]:
```
gme_revenue = pd.DataFrame(columns=['Date', 'Revenue'])

for table in soup.find_all('table'):

    if ('GameStop Quarterly Revenue' in table.find('th').text):
        rows = table.find_all('tr')

        for row in rows:
            col = row.find_all('td')

            if col != []:
                date = col[0].text
                revenue = col[1].text.replace(',','').replace('$','')

                gme_revenue = gme_revenue.append({"Date":date, "Revenue":revenue}, ignore_index=True)
```

In [25]:
```
gme_revenue.tail()
```

Out[25]:

	Date	Revenue

Question 5

In [ ]:
```
make_graph(tesla_data[['Date','Close']], tesla_revenue, 'Tesla')
```

Question 6

In [ ]:
```
make_graph(gme_data[['Date','Close']], gme_revenue, 'GameStop')
```