Question 1: Use yfinance to Extract Stock Data

Using the `Ticker` function enter the ticker symbol of the stock we want to extract data on to create a ticker object. The stock is Tesla and its ticker symbol is `TSLA`.

[7]:
```
tesla = yf.Ticker("TSLA")
```

Using the ticker object and the function `history` extract stock information and save it in a dataframe named `tesla_data`. Set the `period` parameter to `"max"` so we get information for the maximum amount of time.

[8]:
```
tesla_data = tesla.history(period="max")
```

Reset the index using the `reset_index(inplace=True)` function on the tesla_data DataFrame and display the first five rows of the `tesla_data` dataframe using the `head` function. Take a screenshot of the results and code from the beginning of Question 1 to the results below.

[9]:
```
tesla_data.reset_index(inplace=True)
tesla_data.head()
```

[9]:

	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: Use Webscraping to Extract Tesla Revenue Data

In [6]:
```
url = "https://www.macrotrends.net/stocks/charts/TSLA/tesla/revenue"
```

In [7]:
```
html_data = requests.get(url).text
```

In [8]:
```
soup = BeautifulSoup(html_data, "html.parser")
soup.find_all('title')
```

Out[8]:
```
[<title>Tesla Revenue 2010-2022 | TSLA | MacroTrends</title>]
```

In [9]:
```
tesla_revenue = pd.DataFrame(columns = ['Date', 'Revenue'])

for row in soup.find_all("tbody")[1].find_all("tr"):
    col = row.find_all("td")
    date = col[0].text
    revenue = col[1].text.replace("$", "").replace(",", "")

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

In [10]:
```
tesla_revenue.dropna(inplace=True)
tesla_revenue = tesla_revenue[tesla_revenue['Revenue'] != ""]
```

In [11]:
```
tesla_revenue.tail()
```

Out[11]:

	Date	Revenue
46	2010-09-30	31
47	2010-06-30	28
48	2010-03-31	21

Question 3: Use yfinance to Extract Stock Data ¶

Using the `Ticker` function enter the ticker symbol of the stock we want to extract data on to create a ticker object. The stock is GameStop and its ticker symbol is `GME`.

[43]:
```
gme = yf.Ticker("GME")
```

Using the ticker object and the function `history` extract stock information and save it in a dataframe named `gme_data`. Set the `period` parameter to `"max"` so we get information for the maximum amount of time.

[44]:
```
gme_data = gme.history(period="max")
```

Reset the index using the `reset_index(inplace=True)` function on the gme_data DataFrame and display the first five rows of the `gme_data` dataframe using the `head` function. Take a screenshot of the results and code from the beginning of Question 3 to the results below.

[45]:
```
gme_data.reset_index(inplace=True)
gme_data.head()
```

[45]:

	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	1.716074	1.670626	1.683250	11021600	0.0	0.0
2	2002-02-15 00:00:00-05:00	1.683251	1.687459	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	1.662209	1.603295	1.662209	6892800	0.0	0.0

Question 4: Use Webscraping to Extract GME Revenue Data

In [15]:
```
url1 = "https://www.macrotrends.net/stocks/charts/GME/gamestop/revenue"
```

In [16]:
```
html_data = requests.get(url1).text
```

In [17]:
```
soup = BeautifulSoup(html_data, "html.parser")
soup.find_all('title')
```

Out[17]:
```
[<title>GameStop Revenue 2010-2022 | GME | MacroTrends</title>]
```

In [18]:
```
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 [19]:
```
gme_revenue.tail()
```

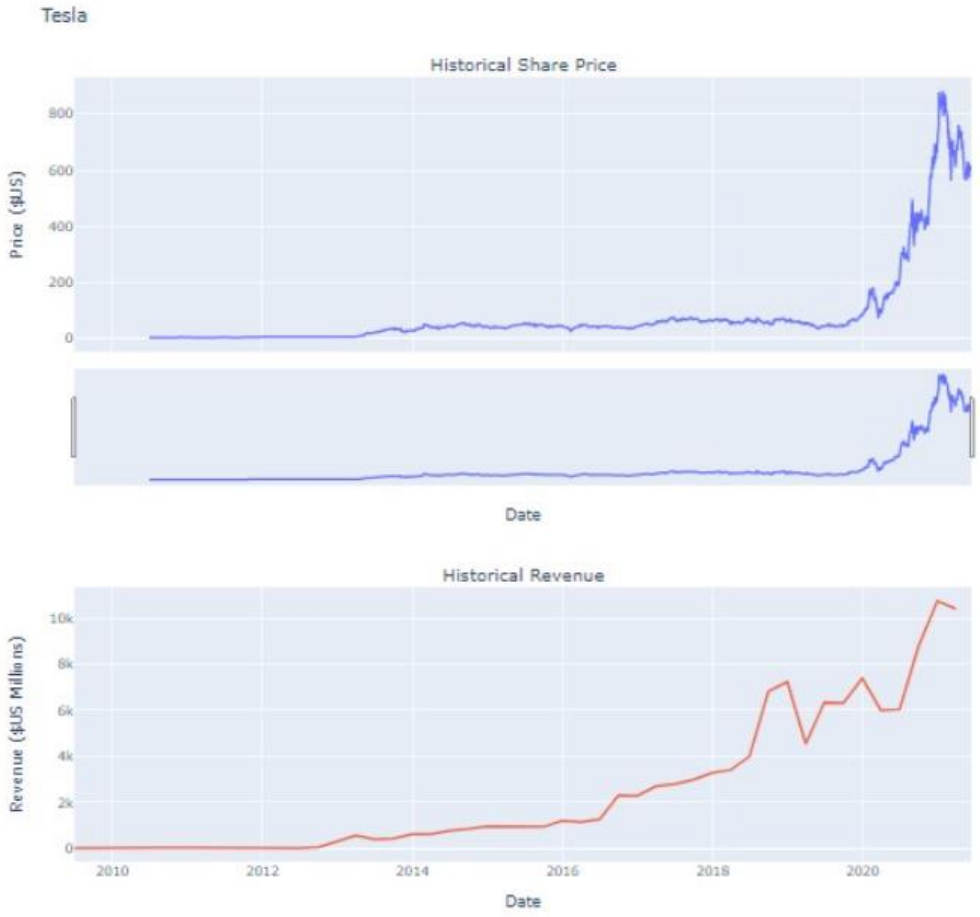
Out[19]:

	Date	Revenue
49	2010-01-31	3524

Question 5: Plot Tesla Stock Graph

Use the `make_graph` function to graph the Tesla Stock Data, also provide a title for the graph. The structure to call the `make_graph` function is `make_graph(tesla_data, tesla_revenue, 'Tesla')`. Note the graph will only show data upto June 2021.

In [23]:
```
make_graph(tesla_data, tesla_revenue, 'Tesla')
```



Question 6: Plot GameStop Stock Graph

Use the `make_graph` function to graph the GameStop Stock Data, also provide a title for the graph. The structure to call the `make_graph` function is `make_graph(gme_data, gme_revenue, 'GameStop')`. Note the graph will only show data upto June 2021.

In [24]:
```
make_graph(gme_data, gme_revenue, 'GameStop')
```