

## Question 1 - Extracting Tesla Stock Data Using yfinance - 2 Points

```
[2]: 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
```

```
[7]: tesla=yf.Ticker('TSLA');tesla_data=tesla.history(period="max")
```

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

```
[8]:
```

	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

Display the last five rows of the tesla\_revenue dataframe using the tail function. Upload a screenshot of the results.

```
[10]: url = "https://www.macrotrends.net/stocks/charts/TSLA/tesla/revenue."
html_data = requests.get(url).text
beautiful_soup = BeautifulSoup(html_data, "html5lib")
tables = beautiful_soup.find_all("table")
for index, table in enumerate(tables):
    if ("Tesla Quarterly Revenue" in str(table)):
        table_index = index
tesla_revenue = pd.DataFrame(columns=["Date", "Revenue"])

for row in tables[table_index].tbody.find_all('tr'):
    col = row.find_all("td")
    if (col != []):
        date = col[0].text
        revenue = col[1].text.strip().replace("$", "").replace(",","")
        tesla_revenue = tesla_revenue.append({"Date": date, "Revenue": revenue}, ignore_index=True)
tesla_revenue.head()
tesla_revenue.tail()
```

```
[10]:
```

	Date	Revenue
50	2010-06-30	28
51	2010-03-31	21
52	2009-12-31	
53	2009-09-30	46
54	2009-06-30	27

### Question 3: Use yfinance to Extract Stock Data

```
[11]: gmestop=yf.Ticker("GME")
gm_data=gmestop.history(period="max")
gm_data.reset_index(inplace=True)
gm_data.head()
```

```
[11]:
```

	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	1.683250	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

```
[ ]:
```



## Use Webscraping to Extract GME Revenue Data

```
[13]: url="https://www.macrotrends.net/stocks/charts/GME/gamestop/revenue."
html_data=requests.get(url).text
beautiful_soup=BeautifulSoup(html_data,"html.parser")
tables=beautiful_soup.find_all("table")
for index,table in enumerate(tables):
    if(str(table)!="GameStop Quarterly Revenue"):
        table_index=index

gme_revenue=pd.DataFrame(columns=["Date","Revenue"])

for row in tables[table_index].tbody.find_all("tr"):
    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)
gme_revenue.tail()
```

```
[13]:
```

	Date	Revenue
51	2010-01-31	3524
52	2009-10-31	1835
53	2009-07-31	1739
54	2009-04-30	1981
55	2009-01-31	3492

```
make_graph(gme_data, gme_revenue, 'GameStop')
```

