Question 2

March 4, 2023

[25]:
```
#!pip install pandas==1.3.3
#!pip install requests==2.26.0
!mamba install bs4==4.10.0 -y
!mamba install html5lib==1.1 -y
!pip install lxml==4.6.4
#!pip install plotly==5.3.1
```

```
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               /  \  /  \  /  \  /  \
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     /  /   \_/   \_/   \_/   \    o \__,
    / _/                       \_____/  `
    |/
```
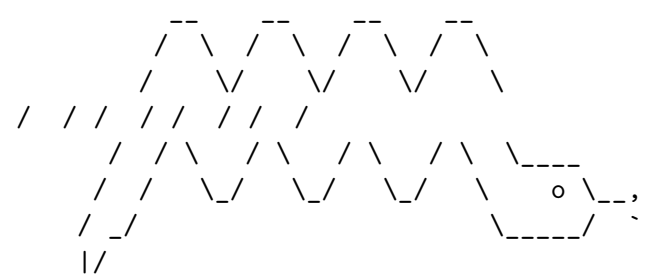

```
mamba (0.15.3) supported by @QuantStack

GitHub:  https://github.com/mamba-org/mamba
Twitter: https://twitter.com/QuantStack
```

```
Looking for: ['bs4==4.10.0']

pkgs/main/linux-64       Using cache
pkgs/main/noarch         Using cache
pkgs/r/linux-64          Using cache
pkgs/r/noarch            Using cache
```

```
Pinned packages:
  - python 3.7.*


Transaction

  Prefix: /home/jupyterlab/conda/envs/python

  All requested packages already installed
```



```
        mamba (0.15.3) supported by @QuantStack

        GitHub:  https://github.com/mamba-org/mamba
        Twitter: https://twitter.com/QuantStack


Looking for: ['html5lib==1.1']

pkgs/main/noarch         [>                   ] (--:--) No change
pkgs/main/noarch         [====================] (00m:00s) No change
pkgs/r/linux-64          [>                   ] (--:--) No change
pkgs/r/linux-64          [====================] (00m:00s) No change
pkgs/r/noarch            [>                   ] (--:--) No change
pkgs/r/noarch            [====================] (00m:00s) No change
pkgs/main/linux-64       [>                   ] (--:--) No change
pkgs/main/linux-64       [====================] (00m:00s) No change

Pinned packages:
  - python 3.7.*
```

```
Transaction

  Prefix: /home/jupyterlab/conda/envs/python

  All requested packages already installed

Requirement already satisfied: lxml==4.6.4 in
/home/jupyterlab/conda/envs/python/lib/python3.7/site-packages (4.6.4)
```

[20]:
```
import pandas as pd
import requests
from bs4 import BeautifulSoup
```

[19]:
```
url = "https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/
 ↪IBMDeveloperSkillsNetwork-PY0220EN-SkillsNetwork/labs/project/
 ↪tesla_data_webpage.html"

data  = requests.get(url).text
```

[ ]:
```
soup = BeautifulSoup(data, 'html5lib')
```

[28]:
```
tesla_data = pd.DataFrame(columns=["Date", "Open", "High", "Low", "Close",␣
 ↪"Volume"])
```

[ ]:
```
for row in soup.find("tbody").find_all('tr'):
    col = row.find_all("td")
    date = col[0].text
    Open = col[1].text
    high = col[2].text
    low = col[3].text
    close = col[4].text
    adj_close = col[5].text
    volume = col[6].text
```

[ ]:
```
tesla_data = tesla_data.append({"Date":date, "Open":Open, "High":high, "Low":
 ↪low, "Close":close, "Adj Close":adj_close, "Volume":volume},␣
 ↪ignore_index=True)
tesla_data.head()
```

[ ]:
```
read_html_pandas_data = pd.read_html(url)
read_html_pandas_data = pd.read_html(str(soup))
tesla_dataframe = read_html_pandas_data[0]
tesla_dataframe.head()
```

[ ]:
```

```