Quiz-Course 5. IBM Python Project for Data Science (Coursera)

Week 1 Quiz- Extracting Stock Data Using a Python Library

1.From the lab exercise, in which country is AMD (Advanced Micro Devices) situated?

- China
- **United States**
- Canada

```
#Install and import required libraries including yfinance
!pip install yfinance==0.2.4
import yfinance as yf
import pandas as pd

#Create an object called amd with the ticker sympol of AMD
amd = yf.Ticker("AMD")

!wget https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBMDeveloperSkillsNetwork-PY0220EN-SkillsNetwork/data/amd.json

# Using the attribute info we can extract information about the amd as a Python dictionary.
import json
with open('amd.json') as json_file:
    amd_info = json.load(json_file)
amd_info

# Confirm that type is dictionary
type(amd_info)

# Get info using the key 'country', as the type of amd_info is a dictionary
amd_info['country']
```

'United States'

2.In the lab exercise, to which sector does AMD (Advanced Micro Devices) belong?

- Electronics
- Agriculture
- **Technology**

```
# Get info using the key 'sector', as the type of amd_info is a dictionary
amd_info['sector']
```

' Technology'

3. In the lab exercise, what is the Volume of AMD traded on the first day (first row)?

219600

```
#Using the history() method get the maximum historical data for the share price of the stock
amd_share_price_data = amd.history(period="max")
amd_share_price_data.head()

# Resetting the index means replacing the current index with a default integer index (0, 1, 2, ...)
amd_share_price_data.reset_index(inplace=True)
amd_share_price_data.head()
```

	Date	Open	High	Low	Close	Volume	Dividends	Stock Splits
0	1980-03-17 00:00:00-05:00	0.0	3.302083	3.125000	3.145833	219600	0.0	0.0
1	1980-03-18 00:00:00-05:00	0.0	3.125000	2.937500	3.031250	727200	0.0	0.0
2	1980-03-19 00:00:00-05:00	0.0	3.083333	3.020833	3.041667	295200	0.0	0.0
3	1980-03-20 00:00:00-05:00	0.0	3.062500	3.010417	3.010417	159600	0.0	0.0
4	1980-03-21 00:00:00-05:00	0.0	3.020833	2.906250	2.916667	130800	0.0	0.0

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Week 1 Quiz- Extracting Stock Data Using Web Scraping

1.In the lab exercise, what is the content of the title attribute from the object soup?

- **<title>Amazon.com, Inc. (AMZN) Stock Historical Prices & Data - Yahoo Finance</title>**
- (AMZN) Stock Historical Prices & Data - Yahoo Finance
- Yahoo Finance

```
#Import the required libraries
import pandas as pd
import requests
from bs4 import BeautifulSoup

# Use Request library for sending an HTTP request to the webpage.
url= "https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBMDeveloperSkillsNetwork-PY0220EN-SkillsNetwork/labs/project/amazon_data_webpage.html"

# requests.get() method
# text method for extracting the HTML content as a string in order to make it readable.
html_data  = requests.get(url).text
print(html_data)

# parse the data using Beatutiful soup library. create a new Beautiful soup object
soup = BeautifulSoup(html_data, 'html5lib')

#content of the title attribute
soup.title
```

<title>Amazon.com, Inc. (AMZN) Stock Historical Prices & Data - Yahoo Finance</title>

➔ `soup.title`

2.In the lab exercise, what are the correct names of the columns of the dataframe?

- 'Date', 'Open', 'High', 'Low'
- **'Date', 'Open', 'High', 'Low', 'Close', 'Volume', 'Adj Close'**
- 'Date', 'Open', 'High', 'Low', 'Close', 'Volume', 'Adj Close', 'max','min'

➔ `amazon_data.columns`

3.In the lab exercise, what is the Open of the last row in the amazon_data dataframe?

- 3,242.36
- 717.32
- **656.29**

➔ `amazon_data.iloc[-1]`

`amazon_data.tail()` and look at row 60

	Date	Open	High	Low	Close	Volume	Adj Close
56	May 01, 2016	663.92	724.23	656.00	722.79	90,614,500	722.79
57	Apr 01, 2016	590.49	669.98	585.25	659.59	78,464,200	659.59
58	Mar 01, 2016	556.29	603.24	538.58	593.64	94,009,500	593.64
59	Feb 01, 2016	578.15	581.80	474.00	552.52	124,144,800	552.52
60	Jan 01, 2016	656.29	657.72	547.18	587.00	130,200,900	587.00

`amazon_data.iloc[-1]`

```
Date          Jan 01, 2016
Open                656.29
High                657.72
Low                 547.18
Close               587.00
Volume         130,200,900
Adj Close           587.00
Name: 60, dtype: object
```