**DAILY ASSESSMENT FORMAT**

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| **Course:** | **python** | **USN:** | **4al16ec074** |
| **Topic:** | **udemy** | **Semester & Section:** | **8-B** |
| **Github Repository:** | **Shreya-test** |  |  |

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| **Image of session** | | | |
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| **REPORT**  **Candlestick data:**  It is a very essential way to show how data in the stock market moves. Some may use it to see how a stock price is doing. Some may also add color to it to visualize it better.  Many also use it to map out trading patterns. They are also very helpful because instead of showing one stock price they have four different price points. These include the open price, close price, high price and low price. Outlining the Code Assuming you have prior Python knowledge, I will be creating this all in a [Jupyter Notebook](https://jupyter.org/" \t "_blank). I will be pulling the data from Yahoo using [pandas\_datareader](http://pandas_datareader/" \t "_blank). Then I will be using [plotly](https://plotly.com/" \t "_blank) to graph this information to visualize them to candlesticks. So a simple outline would look like this:   1. Import necessary libraries 2. Pull data from Yahoo using pandas\_datareader 3. Store data into a DataFrame 4. Match the DataFrame with plotly candlestick format 5. Use plotly to visualize data from the DataFrame  Creating the Code Starting off in Jupyter I do all the necessary imports.   |  | | --- | | import pandas as pd | |  | from pandas\_datareader import data as web | |  | import plotly.graph\_objects as go |   For this example, I will be using Microsoft as my stock. I set the ticker symbol to a variable and then I use pandas\_datareader to get information from Yahoo and store that into a variable. It should automatically save as a DataFrame object. For the date I just have it set to the beginning of last year.   |  | | --- | | stock = 'MSFT' | |  |  | |  | df = web.DataReader(stock, data\_source='yahoo', start='01-01-2019') |   In order for plotly to understand our data, we need to match it with the correct information. They have made it simple and use “traces”, think of traces as options for the graph. We define what we want to use from the DataFrame and then we set these in the options.  We can now set the chart layout in plotly.   |  | | --- | | trace1 { | |  | 'x': df.index, | |  | 'open': df.Open, | |  | 'close': df.Close, | |  | 'high': df.High, | |  | 'low': df.Low, | |  | 'type': 'candlestick', | |  | 'name': 'MSFT', | |  | 'showlegend': True | |  | } |   Then we can now show the visualization. It should look like something like this. Feel free to use the tools to change it around. | | | |
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