

## Term Project Summary

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For the term project I wanted to pull stock prices to better understand the what data is easily available and how hard it is to organize.

I used a methodology from Saman A. Pour to get quotes from AlphaVantage to get started. I slightly modified his code to run a proof of concept. I was bale to get data, make simple plots, and select high volume time periods. His methodology proved to be a good place to start the project.

I pulled data for 20 tickers which included 12 stocks, two commodities, three bond funds and three indexes.

I made a candlestick plot for one of the companies to compare the intra day highs and lows. It looked correct.

For simplicity I only kept the closing price before I joining all of the tickers into one dataframe.

Next, I cleaned up the headers and switched them to either tickers or simple names.

During a check to make sure the data was readable, I noticed that an extra date column was never deleted. Other than that the data looked good.

Finally, I checked for missing data. I specifically investigated Discover Financial Services and American Airlines to see why they were missing data. Both made sense as pone was related to an IPO date and the other was related to Discover's IPO.

I need to learn how to build loop that can run though multiple dataframes. That would make my coding more efficient.

<https://medium.com/@samanamp/fetching-live-stock-market-data-with-python-and-alphavantage-7d0ff8a8d2e4>