Week 2 Challenge

Here is the long awaited Week 2 Challenge. This week we will be working to visualize data, building off the skills establish last week.

Problem Descriptions

You are tired of going to tradingview every week to get a price graph. You wish to visualize your commodity price series using python so that is updates automatically.

1. Using yfinance again, pull 1 year of historical price data for your chosen commodity ETF.
2. Using Matplotlib, plot a line graph of price series of the closing price of the ETF.
3. Candlestick charts are a very popular way of looking at price series. You can also include volume. Here is a guide: https://pythonprogramming.net/more-stock-data-manipulation-python-programming-for-finance/

4. Play around with the bar sizes using the resample function
5. Have python export the graph to a folder to be used in your slides

You would now like to compare the daily returns of two closely related ETFS: IAU and SLV.

5. Using yfinance, pull 2 years of historical price data for IAU and SLV
6. Calculate the daily percent returns in the two ETFs
7. Using Matplotlib, create a scatter plot of the returns. Comment on the strength of the relationship.
8. Create two histograms of daily returns so you may compare them (either overlayed or subplots). How does the volatility of Gold versus Silver compare?