**Task: Analyzing Volumes and Prices**

1. Import the following modules at the start of your algorithm

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2. Create the following variables:



3. Create a list that contains all 1000 tickers. Hint: the print(len(tickers)) should print 1000

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4. Obtain the day by day volume (over the past 3 months) for each stock in “tickers” by making a request to the Polygon.io (<https://polygon.io/docs/stocks/get_v2_aggs_ticker__stocksticker__range__multiplier___timespan___from___to>) and you will get a JSON object as a return value. The response will also contain the day by day closing prices (over the past 3 months).

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Hint: Use an f-string with the two variables from step 2 for the “from” and “to” parameters

4. Use the statistics module to find the average volume of each stock over the past 5 days

5. Use the statistics module to find the average volume of each stock over the past 3 months

6. Create a new empty list called “highvolume”

7. For each ticker in “tickers”, create a function that checks to see if the average volume over the past 5 days is greater than the average volume over the past 3 months. If so add the ticker to the “highvolume” list.

8. Create a new empty list called “trendup”

9. Create a new empty list called “trenddown”

10. For each ticker in “highvolume”, create a function that checks to see if a stock has had an increase in closing price five days in a row over the past five days. If so, add the ticker to the “trendup” list

11. For each ticker in “highvolume”, create a function that checks to see if a stock has had a decrease in closing price five days in a row over the past five days, If so, add the ticker to the “trenddown” list

12. Print out the “trendup” and “trenddown” lists

13. Save your algorithm as a “.py” file in your documents folder:

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14. Run your algorithm from the terminal (change directory to documents before running code)

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