

1 Combining two data sources

Now that we have created a webscrap to get a list of company ticker symbols and we also have a webscrap to get more financial information for them from the Yahoo Finance website, it's time to combine these information sources.

Modify the programs we've created in the previous lecture to have a program that scraps the list of S&P 500 companies for the ticker symbols, and gets the additional information from the Yahoo Finance website.

Furthermore, put this data into a pandas dataframe (in whatever format you think is good/appropriate for further analysis) and save it to a csv file.

Challenge:

Make this webscrap run every 15 seconds, and make sure to not overwrite your previous data file.

1. You can use the time module to get the current time and also have your program wait for a specific amount of time
 - (a) You can use `time.time()` to get the current epoch time
 - (b) You can store `time.time()` in a variable to keep track of the time that an event occurred and reference it later (or subtract it from calling `time.time()` again to get the time difference between the event and now)
 - (c) You can use `time.sleep(seconds)` to make your program wait for a specific number of seconds
2. You can use the os module to check if a specific file exists
 - (a) You can use `os.path.isfile(pathToFile)` to check if the file at the location referenced in `pathToFile` exists.
E.g. `os.path.isfile("test/rt.txt")` checks if the file `rt.txt` exists in the folder `test` (relative to the folder where the program is saved).
3. Also use the datetime module and create an extra column that keeps track of the time the information was recorded
 - (a) You can use `datetime.datetime.now()` to get the current date and time
 - (b) You can use the `.timestamp()` on a datetime object to get the epoch timestamp (e.g. `datetime.datetime.now()` gives the current datetime's epoch time)