

For this homework, you will complete the task without inputting any Python modules/packages.

➤ Read csv data file: AAPL.csv

➤ Process the file into a list of lists/records):

```
[['date', 'ticker', 'open', 'high', 'low', 'close', 'adj close'],  
 ['7/3/2017', 'AAPL', 144.88, 145.3001, 143.1, 143.5, 142.920109],  
 ...  
 ...  
 ['12/29/2017', 'AAPL', 170.52, 170.59, 169.22, 169.23, 169.23]]
```

➤ Add a calculated quantity, daysRange, to the end of each record:

- $\text{daysRange} = \text{high} - \text{low}$

➤ Sort the records according to 'daysRange' and store the result in *aapl_sorted*

➤ Filter the time series:

- Get the list of records where AAPL closed within 1 cent of daily high price:
close_on_high

- Get the list of days where the day's range is within 1% : *low_vol_days*

➤ Write the following results to output data file:

- The first 5 and last 5 records of *aapl_sorted*
- *close_on_high*
- *low_vol_days*

➤ submit the output file online