

Assignment 01

Code the following in MATLAB

The Google Finance API can be used to get stock price data for a given symbol at higher sampling rate than just daily frequency. In this example, GOOG prices from for 15 days with interval of 300 seconds are requested.

<http://www.google.com/finance/getprices?q=GOOG&i=300&p=15d&f=d,o,h,l,c,v>

In which the parameters are:

q= stock symbol

x= exchange symbol, may be omitted, for example the above can be

<http://www.google.com/finance/getprices?q=GOOG&x=NASDAQ&i=300&p=15d&f=d,o,h,l,c,v>

i = interval (here i=300 means intervals of 100 seconds or 5 minutes)

p = number of period (here 15d denotes 15 days of data)

f = parameters (day, close, open, high and low, volume)

(3 points) Write a function that takes input parameters q, i, p, f, and sends requests to Google Finance API, retrieves the response, and returns the close price.

(2 point) Write code that reads a list of symbols from an Excel file, calls the function above for each stock symbol, returns data into a variable, and saves the data to an Excel file.

Note: If only close prices are needed, you will just need the parameter f=c, for example

<http://www.google.com/finance/getprices?q=GOOG&i=300&p=15d&f=c>

The following is an excerpt of the data

```
EXCHANGE=3DNASDAQ
MARKET_OPEN_MINUTE=570
MARKET_CLOSE_MINUTE=960
INTERVAL=300
COLUMNS=CLOSE
DATA=
TIMEZONE_OFFSET=-240
917.72
918.53
918.19
915.67
```

Hint: You can use MATLAB function `urlread()` to read the response and store the result in a variable as follows:

```
x=urlread('http://www.google.com/finance/getprices?q=GOOG&i=300&p=15d&f=c')
```

To split rows, use this syntax

```
data=strsplit(x, '\n');
```

to get columns from the 8th

```
quotes = data(:,8:end);
```

Submission includes code, all the Excel files, and a document explaining your work.