

PlotHiLo.py

This program plots the number of shares achieving their 52 week High or Low prices. The graph is plotted using Gnuplot. A graph for the data will open automatically.

- a. Creates graph for the 52s.L.txt data file
- b. The graph has four lines. A line for the Highs and a line for the Lows and an 8 day average for each line.
- c. To create the four lines, a temporary CSV file is created for each line with its own index.
- d. Gnuplot.py passes the CSV files to Gnuplot
- e. The plot window is a fixed size and position.

Prerequisites

1. Update and Upgrade your Raspberry Pi before installing more libraries.
2. The Gnuplot program is required.
3. The Gnuplot.py function is required.
4. The data file 52s.L.txt is required.

1. Update and Upgrade . (Skip this step if you installed GetHistorical.)

- a. Type `sudo apt-get update`
- b. Type `sudo apt-get upgrade`

Choose Y to continue when asked. This process will take a while.

2. Install gnuplot

- a. Type `sudo apt-get install gnuplot-x11`

3. Install gnuplot.py

- a. Navigate to the sourceforge web page for the gnuplot.py function using Midori or Epiphany web browser.

<http://gnuplot-py.sourceforge.net>

Go to the download page and download the 1.8.tar.gz file. The link below takes you straight to the download area.

<http://sourceforge.net/projects/gnuplot-py/files/Gnuplot-py/1.8/>

Not sure where you should save extracted python files so I did it as follows

- b. Using File Manager create a directory in the Downloads directory called gnuplot-py-files
- c. Navigate to the gnuplot-py-1.8.tar.gz file in the Downloads directory. Right click on the downloaded file and select 'Extract to'. Extract the file to the gnuplot-py-files directory.
- d. Using the LX Terminal window type the following.

```
cd Downloads/gnuplot-py-files/gnuplot-py-1.8
```

```
sudo python setup.py install
```

Program Listing.

Using Midori or similar to navigate to the python file then cut and paste the listing into Idle.

<http://www.rknorman.co.uk/PlotHiLo.py>

Save the program as PlotHiLo.py in the 'Shares' directory

Notes on using PlotHiLo.py

1. An Internet connection is not required.
2. The red line is the number of Highs
3. The green line is the number of Lows
4. The blue line is the 8 day rolling average of Highs
5. The purple line is the 8 day rolling average of Lows

I have two directories with the programs and the data files in them. The 'Shares' and 'SharesData' directories are the main ones. Another pair of directories 'TestShares' and 'TestSharesData' are used as my test environment so I can modify and test stuff without messing up data already collected.

Sources and Contributors

I have borrowed code and ideas from the following sites for this program:

Installing Gnuplot. <http://www.gnuplot.info/>

Gnuplot.py <http://gnuplot-py.sourceforge.net/>

A Python interface to Gnuplot by John Foster

https://www.youtube.com/watch?v=b_y_cLX526c

Disclaimer

I will not be responsible for any monetary loss, loss of data, corruption of files or any other problems resulting from these programs or the installation processes.