

## PlotSingle.py

This program plots the shares graph using Gnuplot. A graph for the share will open automatically. The plot window has to be closed before the next share can be selected.

- a. Creates graph for each share selected
- b. Each graph has four lines. Price, 8 week average, 16 week average & watch/bought/sold price.
- 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.
- f. Each plot window has to be closed before the next can be opened.

## 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. One or more share data files. See GetHistorical

### 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** (skip this set if you have installed PlotShares)

- 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 a web browser Midori, Epiphany or similar navigate to the python file then cut and paste the listing into Idle.

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

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

#### **Notes on using PlotSingle.py**

1. An Internet connection is not required.
2. Close the gnuplot window and press Enter to view the next.
3. Problems with the displayed data usually occur due to index issues. Use ReOrder.py to fix the Index and delete any duplicate records.

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](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.