

Homework 7.1: Files and Visualization

7.1 THE DOW JONES SELECTION (DUE ON MONDAY, AUG 31ST AT 11:59 PM)

The Dow Jones Industrial Average from the beginning of 2008 (dates have been removed for simplifying the exercise) are stored in the “dow” file with each row holding its daily performance. The file contains the following column (OPEN, HIGH, LOW, CLOSE, VOLUME, ADJ_CLOSE). The file has the following structure:

OPEN	HIGH	LOW	CLOSE	VOLUME	ADJ_CLOSE
13261.82,	13338.23,	12969.42,	13043.96,	3452650000,	13043.96
13044.12,	13197.43,	12968.44,	13056.72,	3429500000,	13056.72
13046.56,	13049.65,	12740.51,	12800.18,	4166000000,	12800.18
12801.15,	12984.95,	12640.44,	12827.49,	4221260000,	12827.49
12820.9,	12998.11,	12511.03,	12589.07,	4705390000,	12589.07

1. You should first upload the data from the .csv file and print it.
2. You should perform the necessary exception handling, if the file was not existing.
3. You should extract and store the volume data of the loaded file
4. You should find the index of the every rows (or day) which the volume value is greater than 5.5 billion
5. You should indicate how many rows have volume values greater than 5.5 billion
6. You should write the obtained values from 4 and 5 in a new file (dow_volume_stats.txt) as follows: The dow volume has been above 5.5 billion on 18 days this year. The high_vol_index [12 13 15 51 54 123 125 129 131 132 134 135 136 137 139 140 141 145]
7. plot the ADJ_CLOSE for “every” day in 2008
8. Now over-plot this plot with a 'red dot' marker for every day where the dow was greater than 5.5 billion.