R Programming Challenge: Data Summary

This R Programming Challenge is more of a data manipulation exercise than a programming exercise. Here we will use a data file of daily stock prices and volume to exercise some basic needed data skills on the R data frame.

Here are the data exercises:

(1) Read in the data file and check the 'structure' of the data. Is the variable Date a factor, string, or date? What data type should it be?

(2) Type cast the variable Date into an R date type named TradeDate. Make sure that TradeDate is attached to your data frame.

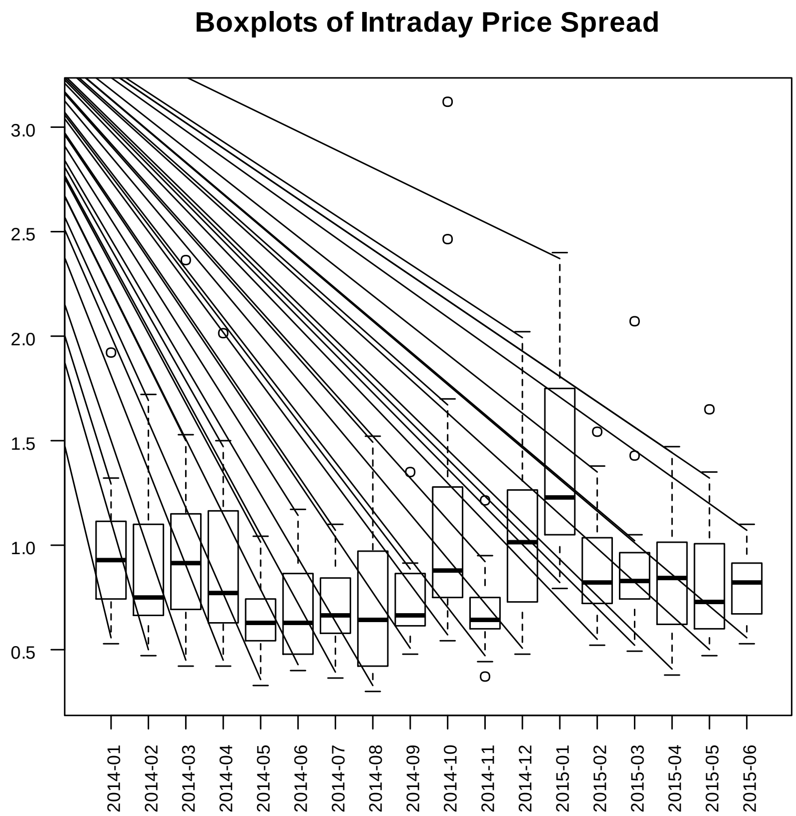
(3) Create a seven character Year-Month string named YearMonth. Make sure that YearMonth is attached to your data frame.

(4) Compute the total trading volume for each YearMonth.

(5) Compute the average closing price for each YearMonth.

(6) Compute the average daily intraday price spread for each YearMonth. Note that this intraday price spread is computed by the daily high minus the daily low.

(7) Use Base R graphics to make this plot.



(8) Use Base R graphics to make this plot.