1. Consider the same data given in Lab 04 (Problem 1) to construct the efficient frontier. Now, construct the minimum variance curve (and efficient frontier) and the feasible region (in the risk-return plot) assuming that short sales are not allowed. In the same plot, also indicate the minimum variance curves (there are three of those) if you consider any two out of three securities at a time. Also, in another graph, plot the weights corresponding to the minimum variance curve (and write the equation that these weights satisfy). *[Note: Look at Capinski for more information.]*

2. Recall the Lab 04 assignment with the data part (Problem 2). In a similar way, do the following: Collect the data of basic BSE (SENSEX) and NSE (NIFTY) index values (from their respective official websites/other sources) for the period from January 1, 2014 to December 31, 2018. Now, for the same period, collect the stock price data for 10 stocks that are included in the index and 10 stocks that are not included in the index, for each of the index. Repeat what you have done in Lab 04, with the index as market portfolio (for both the indices). From the CAPM formula (SML), draw inference about each of the stocks, taking the riskfree rate to be $5\%$. Compare the betas of securities (by taking the actual data and computing from your data for each index).

   Keep the data in two separate Excel files and name them as "bsedata1" and "nsedata1". Obtain data on stocks yourself (and do not copy from others). We will use these data in future assignments too.