CS 403 Algorithm Design & Analysis Lab
Assignment 6

- Submit a report (with full explanation of your algorithm's running time and complexity) along with the codes and read me file in a zipped folder. The report should be in PDF format as a single document. If you want to assume something during coding, then mention in your report.
- The deadline of submission is ***11:59 am 19 May 2018, Saturday*** . Late submissions will have penalty of 15% per day (that is 15% per day will be reduced on the score you achieve as the late submission penalty).
- You have to do code for all questions and give a good explanation in your report. Your reports would be evaluated thoroughly. Please provide pseudo codes in report.
- We will provide test data sets at the time of evaluation. In that case, your code should be well generalized. Analyze your codes with different test sets during implementations of algorithms.
- Submit your assignments only to coursetacs403@gmail.com

1) Implement the improved approximation algorithm for load balancing.
2) Implement the algorithm for center selection problem without knowing anything about the radius (see section 11.2 in the text book).
3) Cast the vertex cover problem as an integer programming problem. Implement LP algorithm to find approximate solution to the vertex cover problem.
   Note : For 3), you can directly use simplex algorithm routine to perform LP optimization.