## **Problem Set 7E**

You will need to submit the ps7e\_answer.tex file containing your grading explanation to the Stellar assignment "Problem Set 7E – LaTeX Template" by **Thursday, December 8th, 11:59PM**. Your grade for Problem 2(t) in Problem Set 7 will be based on both your solutions and the grading explanation.

**Problem 7E-1.** Please write a short explanation of your pseudo-code for Problem 2(t) in Problem Set 7. Assume the grader is familiar with the problem and with the staff solution. If your solution is very similar to the official solution, please state that, and point out and explain any differences. If your solution is correct, but very different from the official solution, write a brief explanation to convince the grader that your solution is correct. If your solution is partially correct, point out the parts that you got right, and explain your mistakes.

## Answer:

Assuming limit is a table.

Algorithm, first of all, updates limit table and set maximum limits regarding given amount of cash to calculate every real possibility.

With bottom up approach, builds profit table. For every amount starting from 0, calculates best stock to buy until either it's limit is drained or no cash available to buy the stock. This cycle runs till algorithm isn't able to buy any stocks or not buying is better.

How limit drains? With every purchase, profit table asks from upper level for limit-1'th possibility from table to buy another. If limit equals 0, algorithm looks from other stocks' profits for best profit.

Top level of profit table contains just the final profit, just a number. So, this does not show how many and which stocks we bought.