

## **SYDE 423 - Fall 2008. Assignment 3.**

Assigned Monday Oct 20. Due Monday October 27.

1. From the textbook, solve questions 1 and 5 in Exercises 8.4.
2. *Programming Question:* From the midterm exam, question 3: implement each of the brute force, the divide-and-conquer, and the dynamic programming algorithms, for the problem of finding the optimal buying and selling days in a sequence of prices for a given stock. If there was no way to make profit during the  $n$  days, the algorithms should report this. Thoroughly test your code and present your test cases along with the output computed by each algorithm.

Please refer to the course web page for a copy of the midterm exam with solutions. Submit your source code by e-mail before Monday's class.