

## CMSC 451: Homework 6, Spring 2005

Due at the beginning of class on **May 12, 2005**.

Warning: some of the problems require thought - do not wait until the last day to start working on them!

If you cannot come up with algorithms that run in the required time, then provide (correct) slower algorithms for partial credit. Write your answers using *pseudo-code* in the same style as the textbook. These make the algorithm description precise, and easy to read (as opposed to code in C or some other language).

0. Read and understand the statements of Theorems 8.20, 8.21, 8.22, 8.23 and 8.24 in the textbook. You are not required to study their proofs, but you need to understand what the problems referred to in these theorems mean. This problem will not be graded.
1. Problem 1 in Section 11.10, pages 614 and 615 of the textbook.
2. Problem 3 in Section 11.10, pages 615 and 616 of the textbook.
3. Problem 1 in Section 13.14, page 737 of the textbook.
4. Problem 2 in Section 13.14, pages 737 and 738 of the textbook.