

CMSC 451: Homework 6, Spring 2006

Due at the beginning of class on **April 25, 2006**.

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).

The problems should be done by yourself: without any collaboration, or help from sources such as the Web.

NOTE: You must prove the correctness of your algorithms.

1. Exercise 1, Chapter 8, page 505. (10 points)
2. Exercise 2, Chapter 8, page 505. (10 points)
3. Exercise 5, Chapter 8, page 506. (10 points)
4. Exercise 22, Chapter 8, page 517. (10 points)