

CMSC 451: Homework 5, Spring 2006

Due at the beginning of class on **April 6, 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 6, pages 312-313. (15 points)
2. Exercise 2, Chapter 6, pages 313-314. (10 points)
3. Exercise 7, Chapter 6, pages 318-319. (5 points)