Computer Science 2300: Homework 2

Due: February 9, 2009

Note: Please use rigorous, formal arguments. If you are asked to provide an algorithm then you may either write pseudocode similar to the pseudocode in the DPV text, or provide a clear description in English (similar to the description of the permutation algorithm given in the Homework 1 handout). You **must** also provide an argument for why the algorithm is correct. All problems this week are from the DPV text. We encourage you to collaborate with other students, while respecting the collaboration policy. Please write the names of all the other students you collaborated with on the homework.

1. (10 points) Problem 2.3 (page 71).

2. (10 points) Problem 2.4 (page 71).

3. (10 points) Problem 2.13 (page 73).

4. (10 points) Problem 2.16 (page 73).

5. (10 points) Problem 2.17 (page 73).

6. (10 points) Problem 2.20 (page 74).

7. (10 points) Problem 2.23 (page 75).

8. (10 points) Problem 2.27 (page 76).