

Computer Science 2300: Homework 6

Due: April 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. You **must** also provide an argument for why the algorithm is correct, and an analysis of the running time. 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. **Hardcopies are required by submission time. E-mailed versions will not be accepted.**

1. (5 points) DPV Problem 5.2 (page 148)
2. (5 points) DPV Problem 5.5 (pages 148-49)
3. (5 points) CLRS Problem 21.3-3 (page 509)
4. (5 points) CLRS Problem 23.2-4 (page 574)
5. (10 points) DPV Problem 5.19 (page 151)
6. (10 points) CLRS Problem 16.2-7 (page 384)
7. (10 points) DPV Problem 5.32 (page 154) (**remember to prove correctness, or you will not receive any credit!**)