CS 170: Problem Set 7
Due: October 14, 2011, 4:00 p.m.

Instructions: Turn this in to the class homework boxes in 283 Soda by 4:00 p.m. on Friday, October 14, 2011. Please begin your answer to each question on a new sheet of paper and make sure each sheet is labeled with your name, SID, section number, GSI name, the assignment number, the question number, and “CS 170 – Fall 2011.”

Because each problem will be graded by a different reader, please turn in each question in a different box in 283 Soda. Question \(i\) goes in the box labeled “CS 170 — \(i\).”

Please read the class webpage for rules regarding collaboration (encouraged!) and cheating (forbidden!) on homework.

DPV = Dasgupta, Papadimitriou, and Vazirani.

Huffman Encoding

1. DPV 5.14
2. DPV 5.16

Designing Greedy Algorithms

3. DPV 5.28 (You should assume that person \(u\) knows person \(v\) iff person \(v\) knows person \(u\).)

Minimum Spanning Trees

4. DPV 5.2
5. DPV 5.7
6. DPV 5.9a-g