CS395T: Randomized Algorithms
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Problem Set No. 3
due: Oct. 5, 2006

1. Exercise 3.5 (page 50).

2. Exercise 3.7 (page 52).

3. Problem 1.9.

4. Problem 4.8.

5. Give a randomized (Las Vegas) algorithm to find the maximum item among n items in a constant expected number of rounds. In a round, an algorithm specifies n comparisons to be made, and then receives the results of these comparisons. The algorithm may do an unlimited amount of computation between rounds; however, the only access the algorithm has to the values of the items is the n comparisons made in a round.