CS170_F’08 Outcomes List – Satish Rao

1. Knowledge of several techniques in algorithm design: Divide and conquer, greedy algorithms, dynamic programming, and linear programming.

2. The ability to use the above techniques to address algorithmic problems.

3. The ability to use techniques taught in CS70 (mathematical induction, invariants, number theory) to prove the correctness of algorithms for various problems, as well as to prove running time bounds.

4. The ability to understand and apply randomized techniques in algorithm design.

5. The acceptance of the fact that numerous natural problems probably do not have efficient algorithms through the theory of NP-completeness.

6. The ability to prove that certain problems are NP-complete.

7. To have an understanding on how to attack problems that are NP-complete.