

CS381 Homework Assignment Number 10, due Friday, Nov 4, 2005

Please write your name and net id on the upper right corner of each page.

1. 7.3.1 c (cycle)
2. 7.3.3c (half)
3. 7.3.4 d and e
4. Construct a single tape Turing machine that performs multiplication. The Turing machine should start in a state q_0 scanning the leftmost symbol on the tape. If the contents of the tape are 01^n01^m0 followed by all blanks, then the Turing machine should eventually halt with $01^{nm}0$ possibly followed by some 0's and then all blanks on the tape.