Formal Languages and Automata Theory
Homework #6

1) Construct a Deterministic Turing Machine for each of the following.

    (a) {w | w is in {0,1}* and w ends in 00}
    (b) {w | w is in {0,1}* and w contains at least 2 0's}
    (c) {w | w is in {0,1}* and w contains at least one 0 and one 1}

2) Suppose the input to a turing machine consists of two n-bit binary numbers separated by a # character. Give a deterministic turing machine that will determine if the first binary number is larger than the second. Note that the turning machine should output 1 to the right of the second number if the answer is yes, and a 0 if the answer is no.