ECE 232 Homework 4
Due March 10, 2005

Do this homework by yourself or in groups of up to 3 students. If you do this homework in a group, simply hand in one copy on behalf of the group.

(1) Complete the design of the hardwired implementation of the finite state machine shown in Figure 5.38 (Second Edition: Figure 5.42). Using one-hot coding (i.e., the number of D flip-flops equals the number of states, and the Q output of flip-flop i is 1 if and only if the machine is currently in state i), write logic equations for the D inputs of each of the 10 flip-flops.

(2) Problem 5.45 (Second Edition: Problem 5.21).

(3) Problem 5.48 (Second Edition: Problem 5.26).