ECE 2300L

Prelab:
Design a synchronous sequential circuit using D flip-flops for the state diagram shown below:
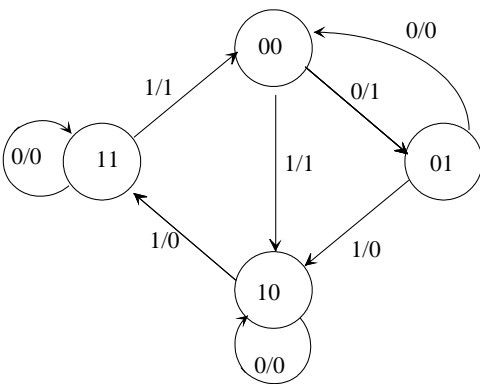
LAB:

Implement the above circuit using a minimum number of chips. Demonstrate the lab using switches, resistors, flip-flops, and seven-segment displays as needed.

POSTLAB:

1. What is the basic difference between a latch and a flip-flop?
2. What is the difference between Mealy and Moore circuits? Classify the above circuit as Mealy or Moore? Justify your answer.
3. What is the purpose of a debouncing circuit?