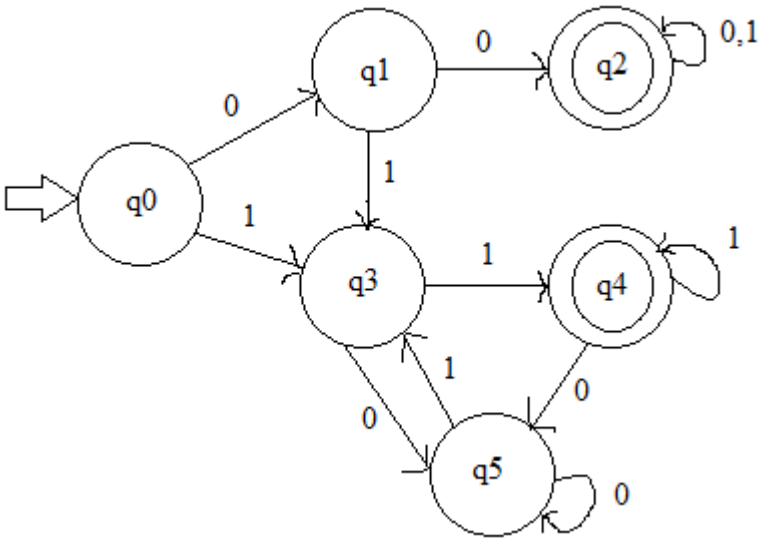
COT 4210 Quiz #0 Solution

Due 1/15/2021

1. (5 pts) Draw a DFA that accepts strings over the alphabet {0, 1} that start with 00 or end with 11. (Thus, 0010101 and 01010011 are in the language, but 010001 is not.) In your drawing, clearly indicate which state is the start state with an arrow outside the state, which states are accept states, as well as each transition for each ordered pair of state and alphabet character. (Thus, if your drawing indicates n states, then you should have 2n transitions indicated via the appropriate directed edges.)

Possible Solution



Grading Criteria:

1 pt - clearly labeled start state, clearly labeled accept states (take off pt if any of these aren't Marked)
1 pt - has 2 transition arrows out of each state, one labeled with 0, one labeled 1ith 1 (take off the point if any arrow is missing or if there are 2 arrows to different places with the same label from the same place.)
1 pt - accepts all strings that start with 00
1 pt - accepts all strings that end with 11
1 pt - rejects all strings NOT in the language