Mini-midterm2

1. Construct a NFA
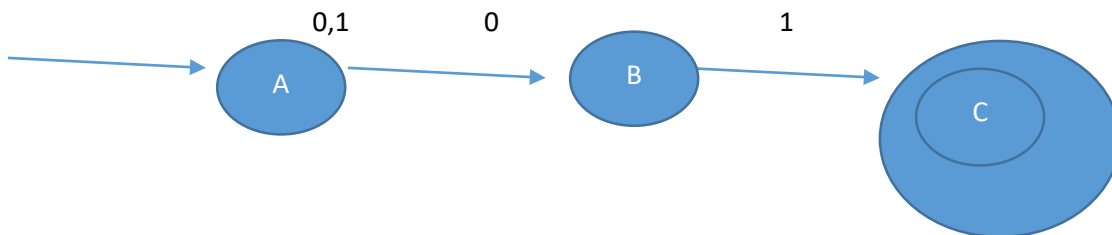   Construct a NFA that accepts sets of all strings over {0,1} that starts with '10'

2. Convert of NFA to DFA

   Given below is NFA for a language

   L={set of all strings over (0,1) that ends with '01'}. Construct its equivalent DFA
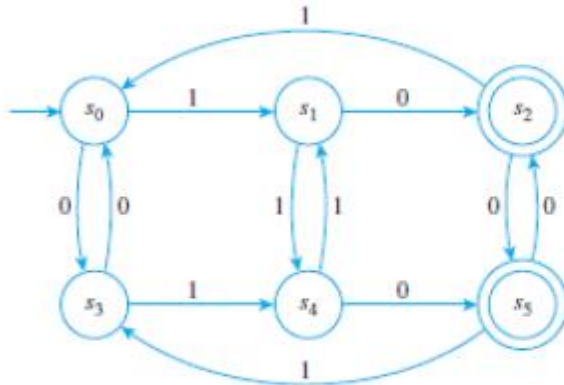
   NFA

3.

   (a) design an automaton with the given input alphabet that accepts the given set of strings, and

 (b) find a regular expression that defines the language accepted by the automaton.

Input alphabet = {a, b}; Accepts the set of all strings that contain exactly two b's.

4.

Consider the finite-state automaton A given by the following transition diagram:

a. Find the 0-, 1-, and 2-equivalence classes of states of A.

b. Draw the transition diagram for Āthe quotient automaton of A.

5.

Are the automata A and A' shown below equivalent?