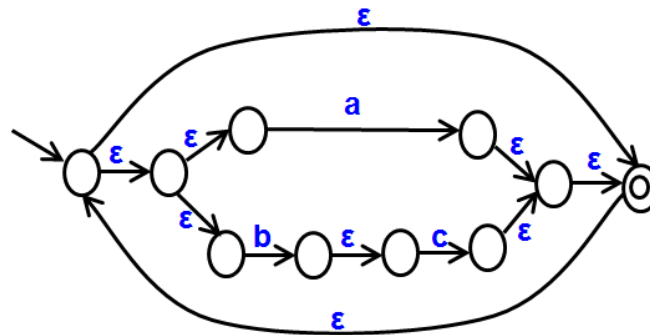


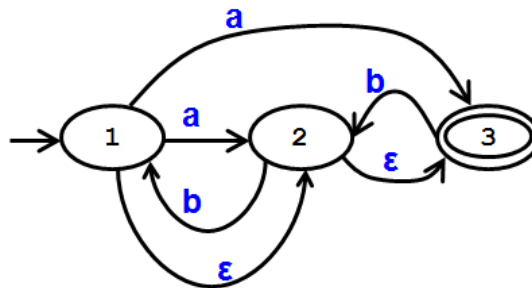
CMSC330 Fall 2013 Quiz #2 Solutions

1. (8 pts) RE to NFA

Create a NFA for $(abc)^*$, using the algorithm discussed in class.



2. (12 pts) Consider the following NFA.



- a. (2 pts) Does the NFA accept the string “bb”? If it accepts the string, list a sequence of state transitions (e.g., 1,2,3) that leads to acceptance of “bb”.

1,2,3,2,3,2,3 OR 1,2,3,2,1,2,3 OR 1,2,1,2,1,2,3

- b. (10 pts) Convert the NFA to a DFA using the subset construction algorithm discussed in class. Be sure to label each state in the DFA with the corresponding state(s) in the NFA.

