

Theory of Computation, Fall 2021

Assignment 2 Solutions

Exercises

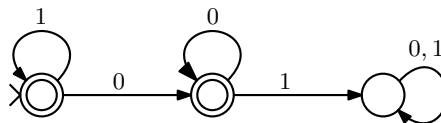
Q1. The configurations are (q_1, e) , (q_2, e) and (q_3, e) . It accepts abb .

Q2. (a) $L(M') = \{w \in \Sigma^* : w \notin A\}$.

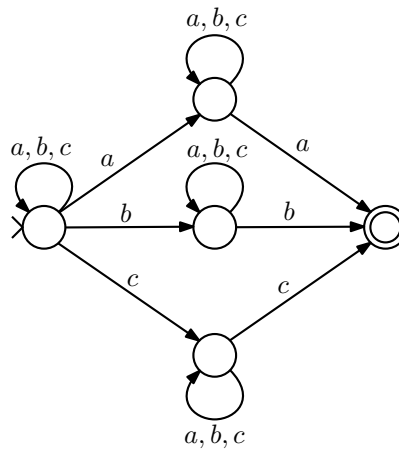
(b) No. Consider the following N and N' . It is easy to see that a is accepted by both of N and N' .



Q3. The following DFA accepts L . Therefore, L is regular.



Q4. The following NFA accepts L .



Q5. The DFA we get is the following.

