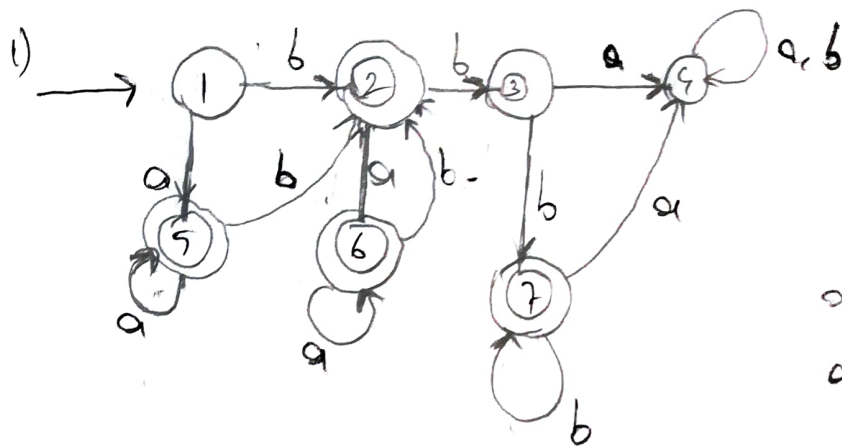


On my honor, I have neither given nor received any unauthorized aid for inappropriate assistance for all sessions of this exam. The work done on this exam is totally my own. I understand by the school code, violation of these principles will lead to a zero grade and is subject to harsh disciplinary actions.

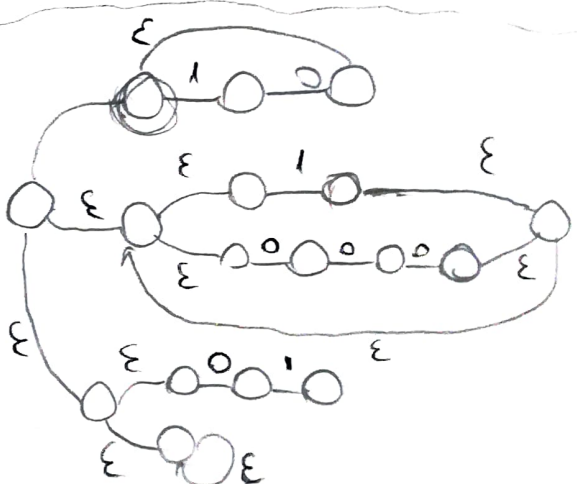
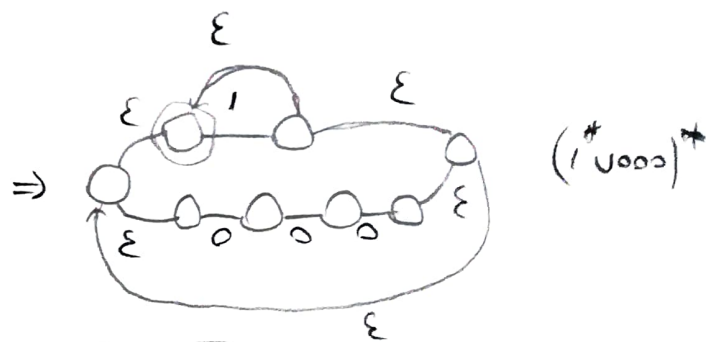
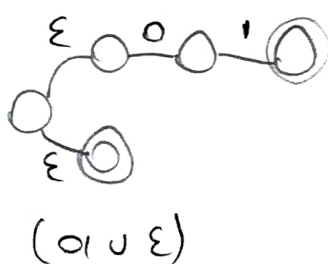
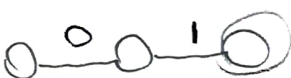
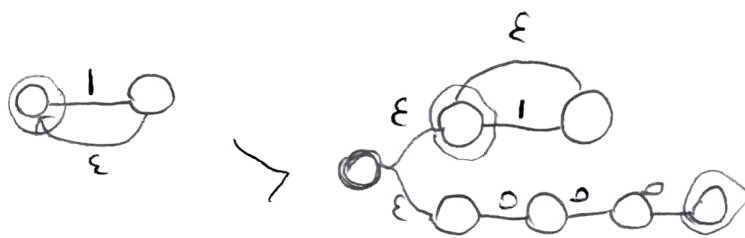
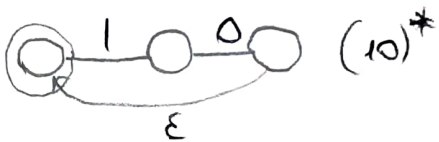
Yunus Emre Erdem

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only 1, 4, are not
accept state

$$2) (10)^* (1^* \cup 000)^* (01 \cup \epsilon)$$



3) Let's say

$L = \{a^n b^m \mid n, m \geq 0\}$ this is our regular language definition

The rule says that union of regular languages are also regular.



we can combine all of them and it will be \Rightarrow regular.

It is regular because rule does not restrict number of languages that you combine.