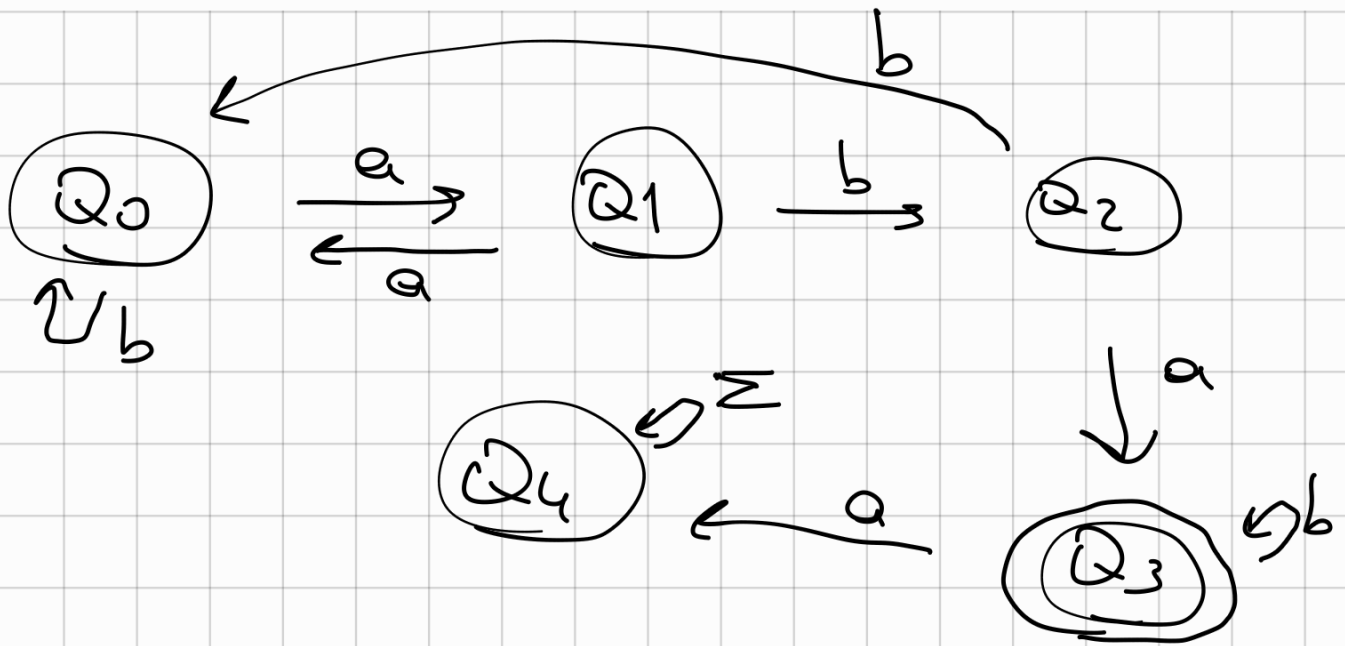


Ceng 491- Assignment I

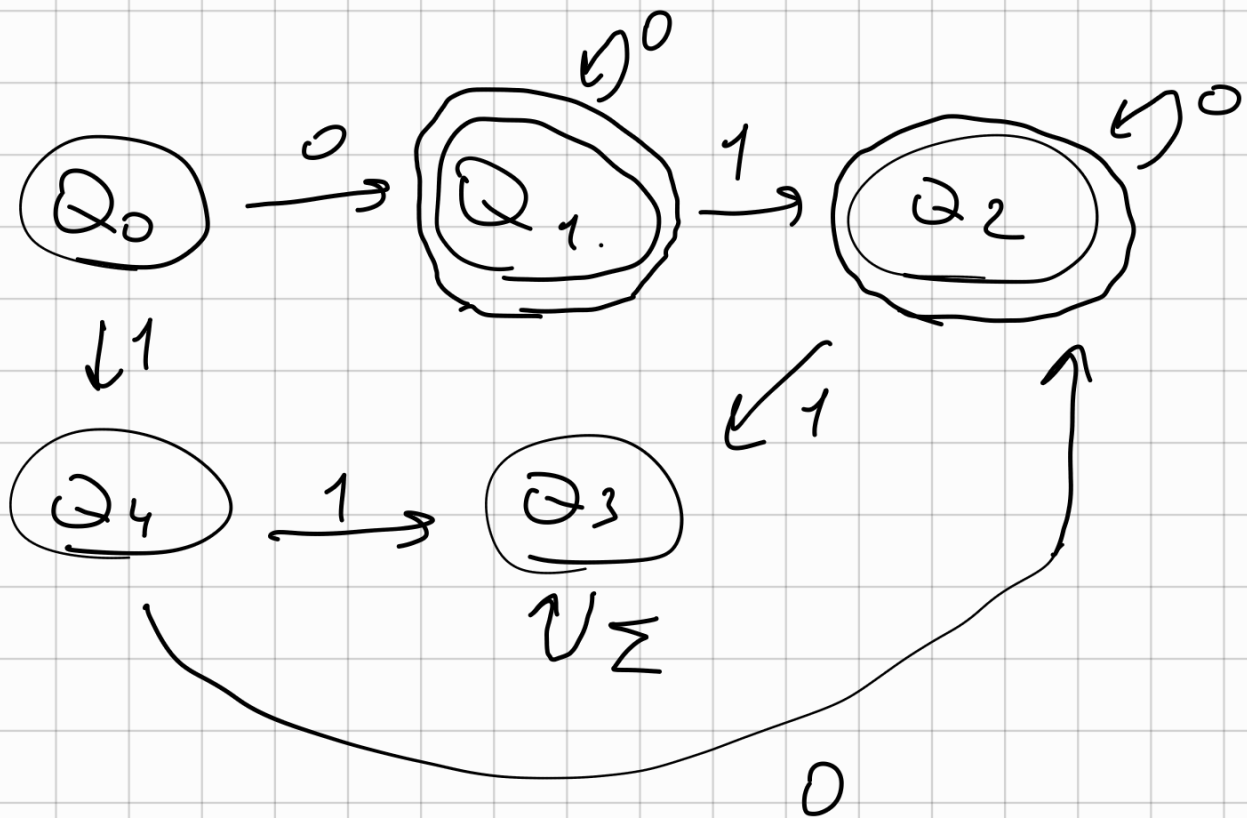
Questions

1. Design a DFA for all strings over the alphabet $\Sigma = \{a, b\}$ that contain aba but not abaa as a substring.
2. Design a DFA for the language
 $L = \{w \mid w \text{ at least one } 0 \text{ and at most one } 1\}$
3. Design a DFA for the language
 $L = \{w \mid w \text{ does not contain } 100 \text{ as a substring}\}$
4. Design a DFA all strings over the alphabet $\Sigma = \{a, b, c\}$ where only two of the symbols occur odd number of times.
5. Design a DFA all strings over $\Sigma = \{0, 1\}$ in which every pair of adjacent 0's appears before any pair of adjacent 1's.

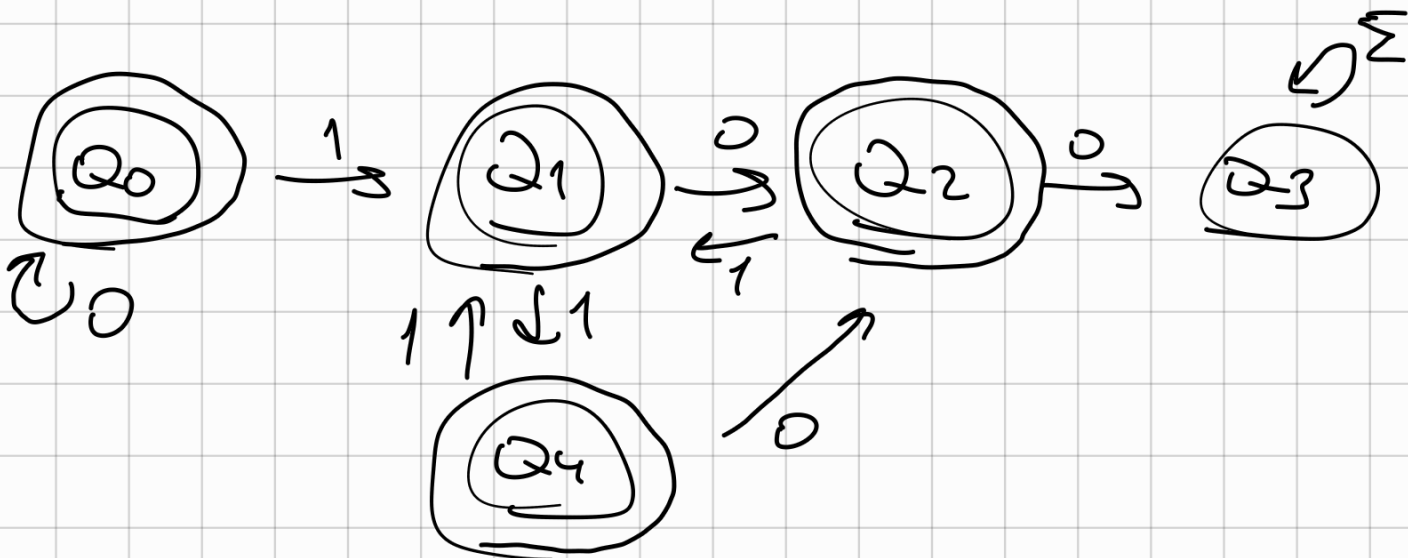
1-



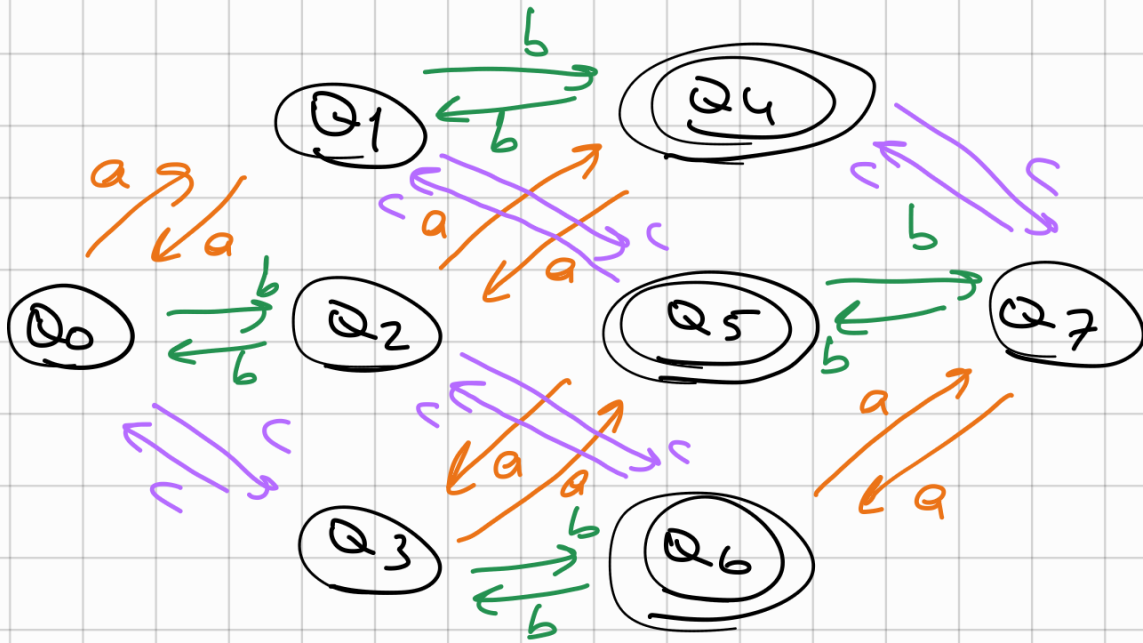
2-



3-



4-



5-

