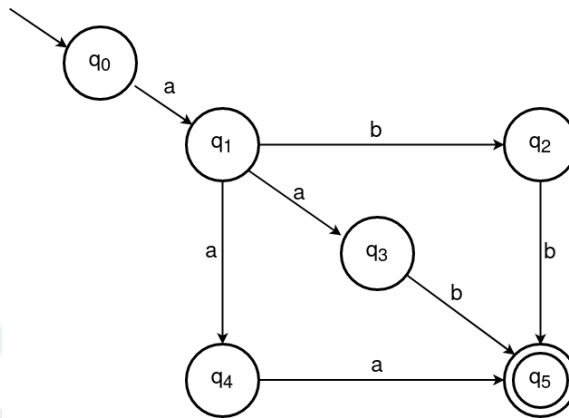


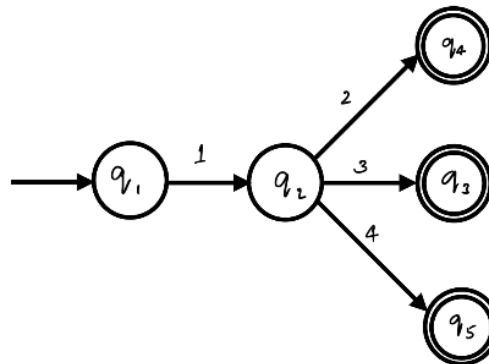
Assignment - 2

CS304

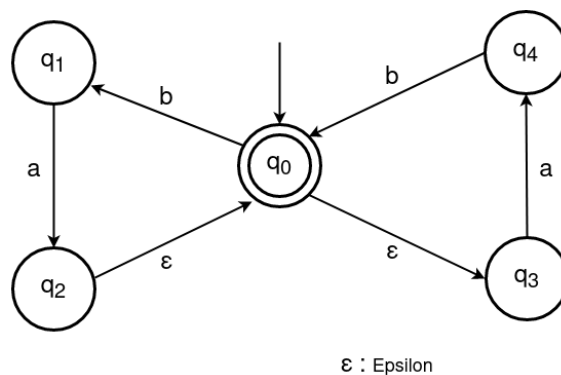
1. Convert the following finite automata to a regular expression.



2. Convert the following finite automata to regular expression using the state elimination method. Show all the steps.



3. Convert the following finite automata to a regular expression.



4. Convert the following regular expression to ϵ -NFA.

$$(a + b + ca)((bab)^* + (a + b)^*)(ab)^*$$

5. Convert the following regular expression to ϵ - NFA .

$$b(a + ba + abb)(ba(a + b)^*)$$

6. Convert the following regular expression to NFA . Show all the intermediate states.

$$(bb + bbb)^*$$