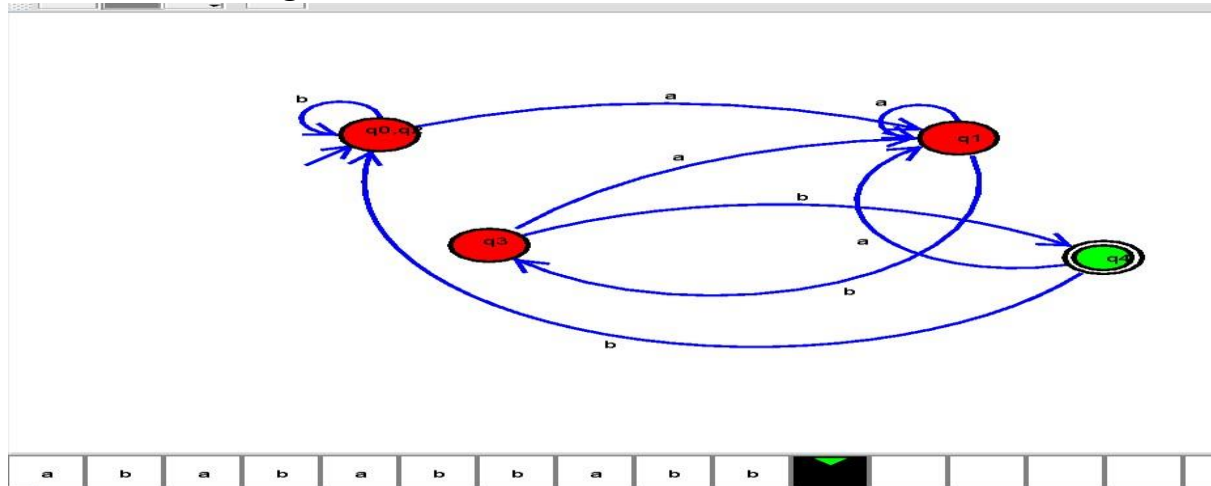
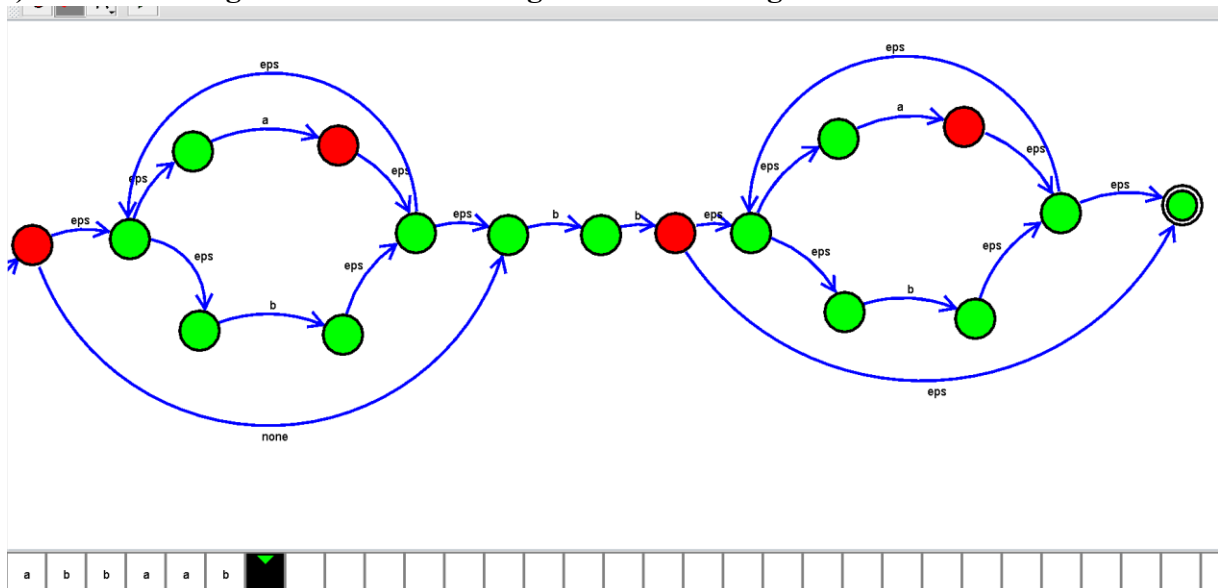


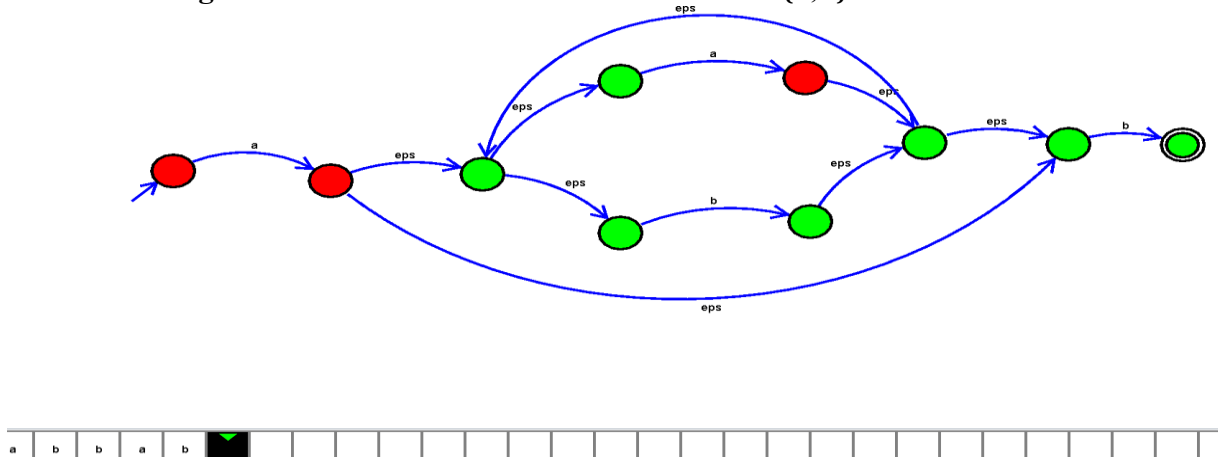
1. Minimize the DFA given below:



i) Set of all strings of a's and b's having bb as a substring

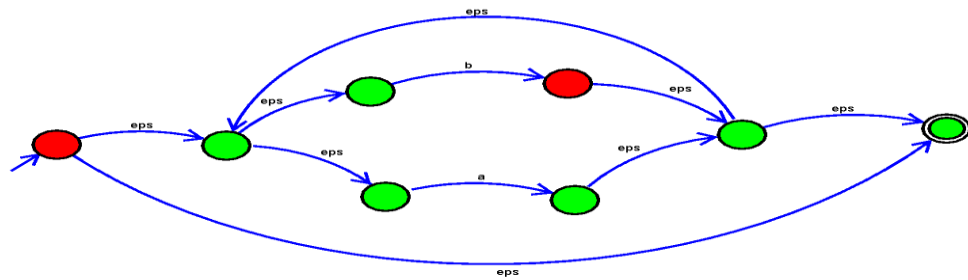


Set of all strings that start with a and end with b over $\Sigma = \{a, b\}$



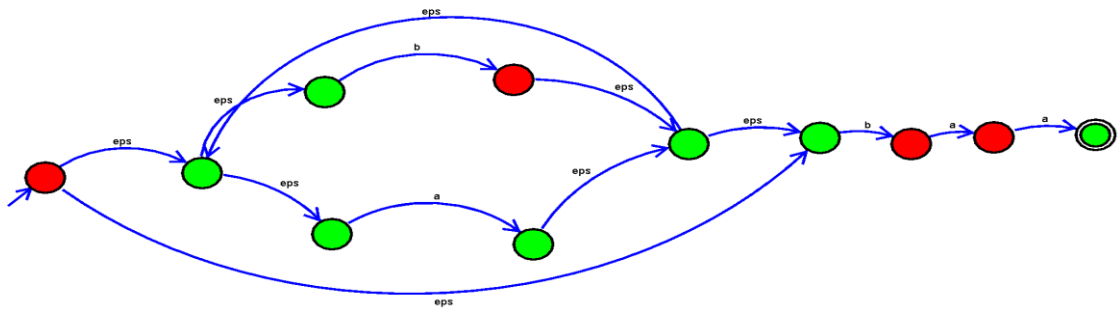
Identify the language defined by the r.e:

i) $(0+1)^*$



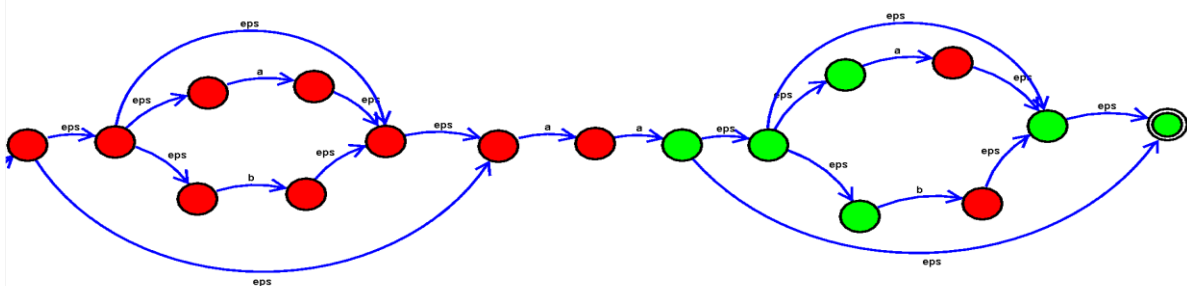
a b b a

ii) $(0+1)^*011$



a b b a a

iii) $(a+b)^* aa (a+b)^*$



b a a

Construct NFA with ϵ -moves equivalent to the regular expressions given below:

i) $(a^*+b^*)^*$

