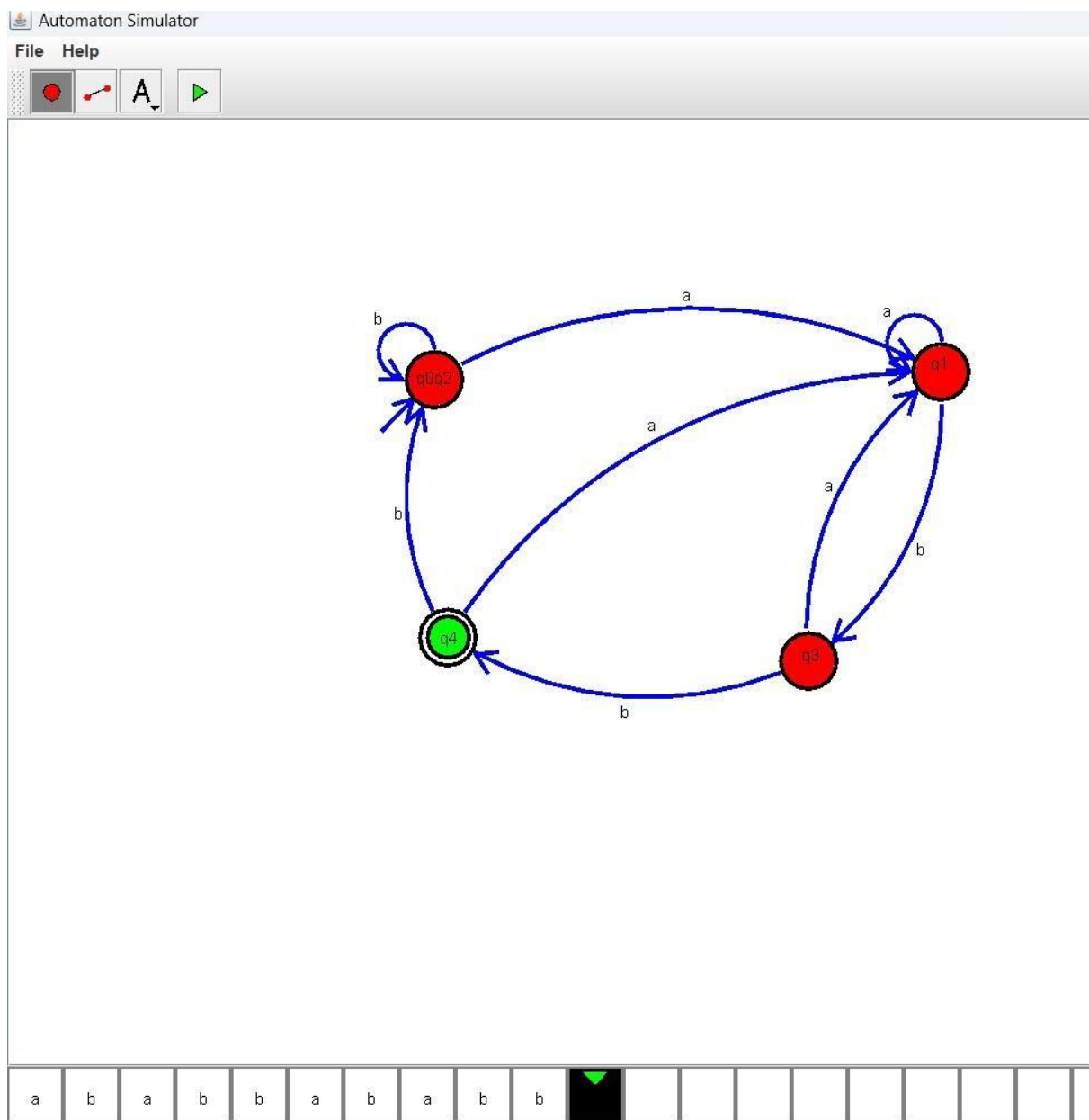
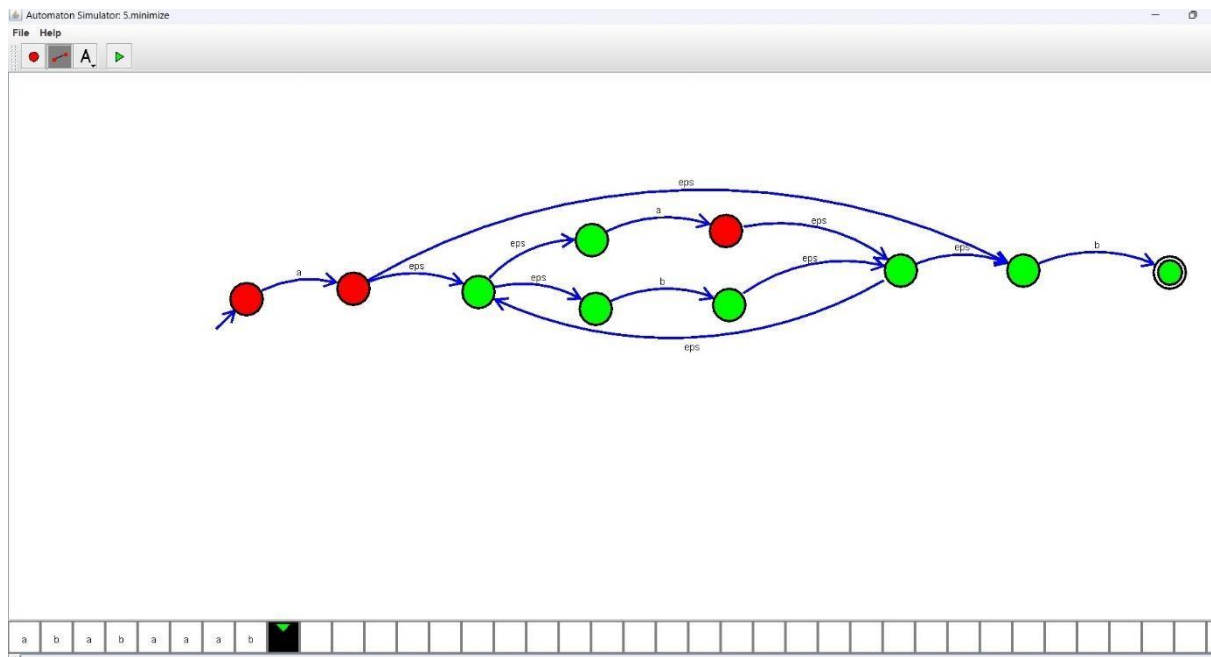


1. Minimize the DFA given below:



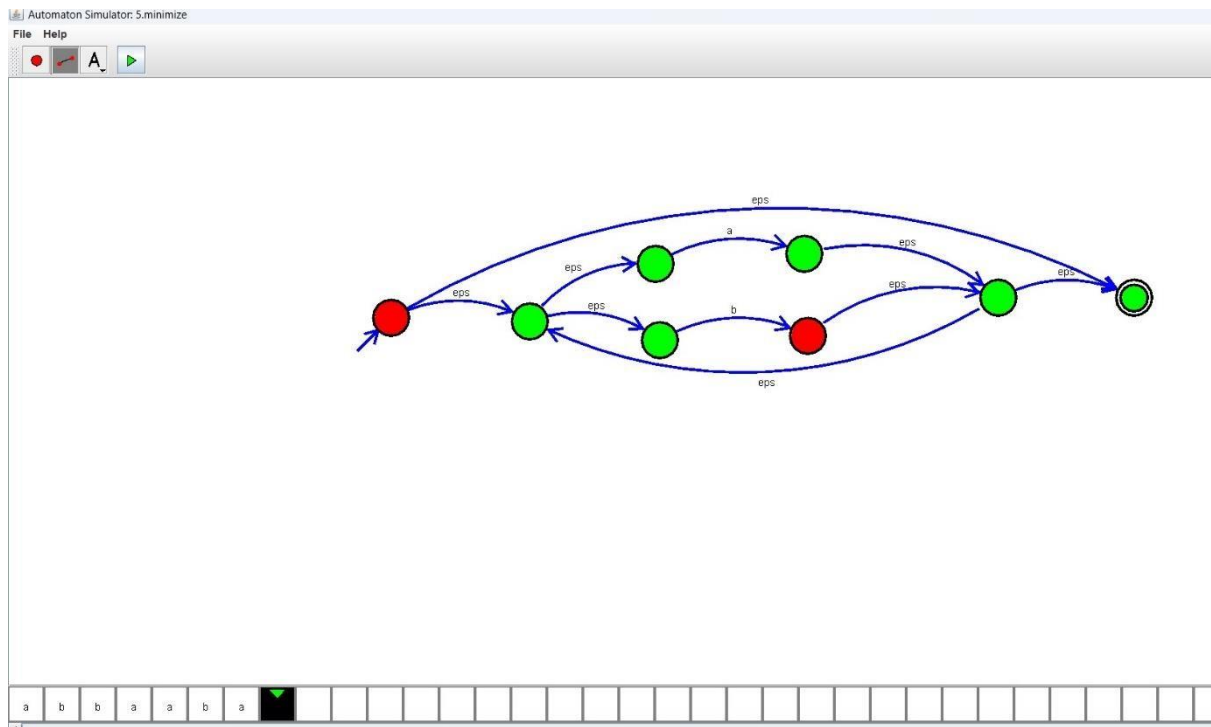
2.1 Define r.e. for the following languages:

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



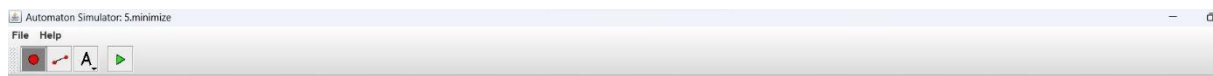
2.2 Identify the language defined by the r.e:

$(0+1)^*$



3. Construct NFA with ϵ -moves equivalent to the regular expressions given below: i)

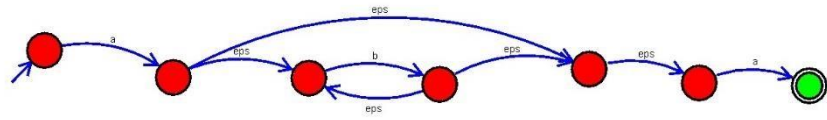
$$(a^* + b^*)^*$$



ii) $(01 + 10)^*$

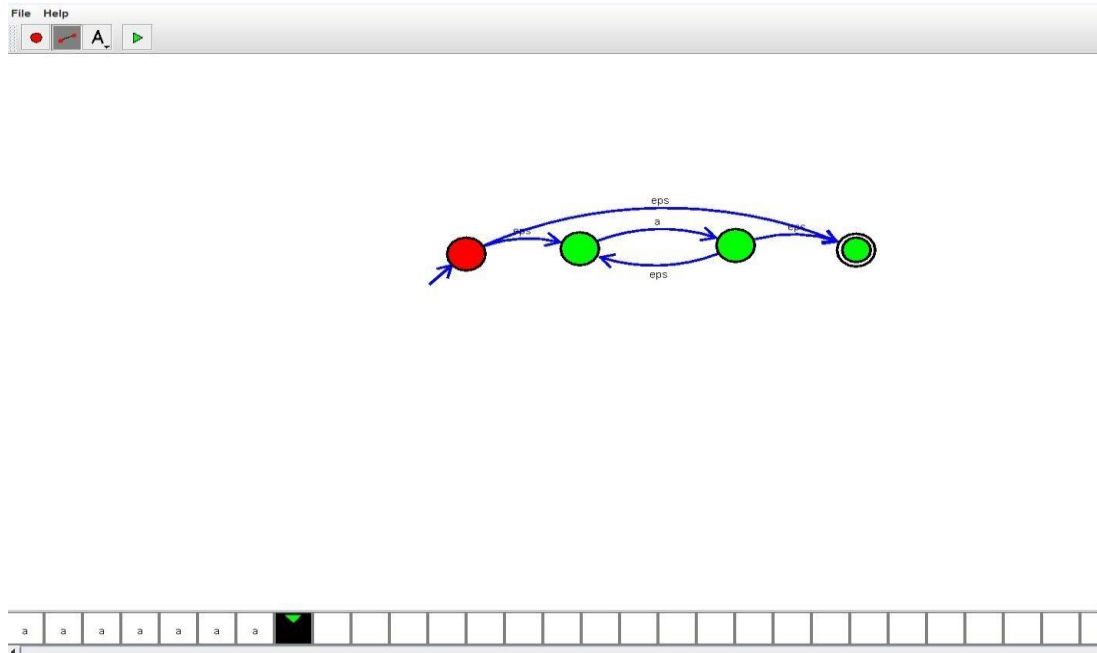


iii) ab^*a

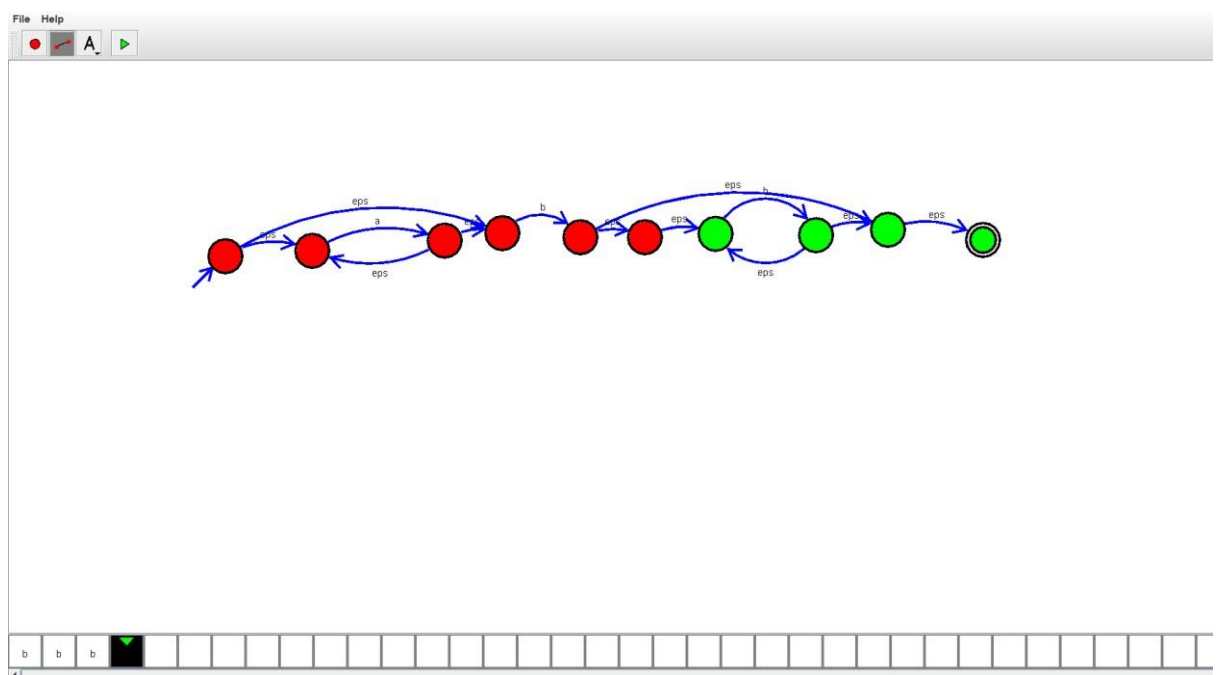


4. Construct r.e. from the DFA given below:

S1: a^*



S2: a^*bb^*



S3: $a^*bb^*a(a+b)^*$

