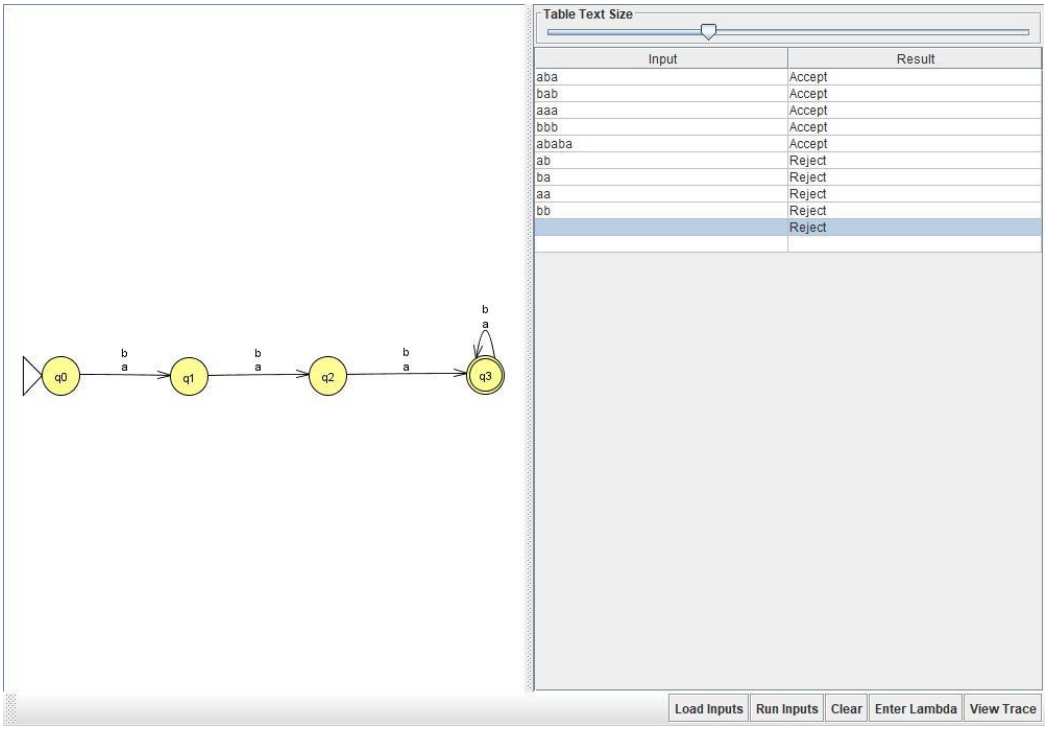
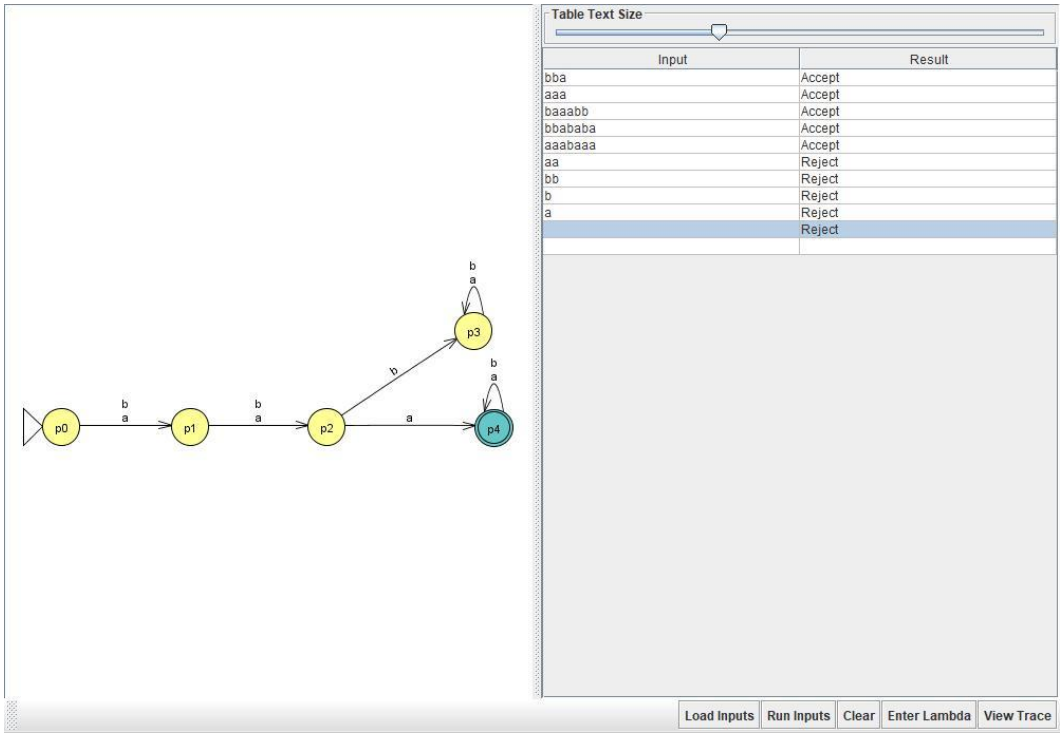
Kumal Patel
Kspatel8

1.

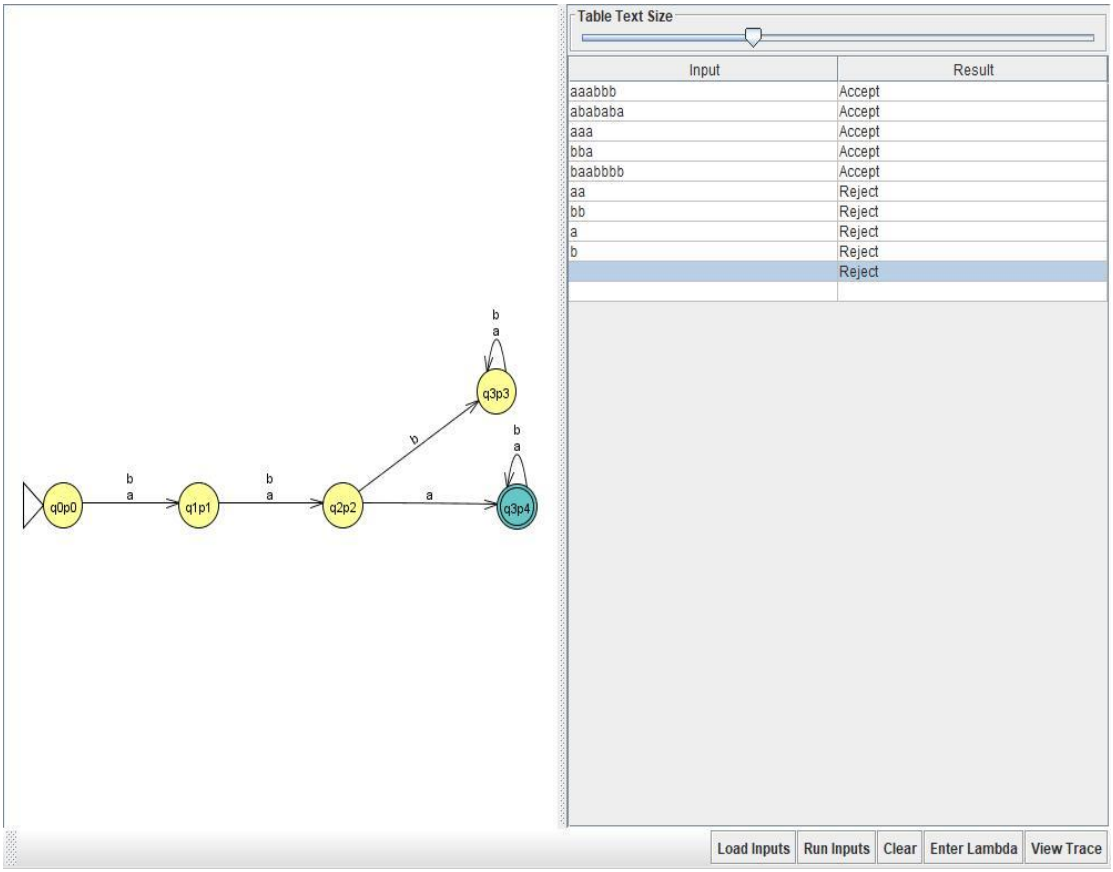
L_1 = { w ∈ {a,b}* | w has a length of at least 3}



L_2 = {w ∈ {a,b}* | w 3 symbol is a}

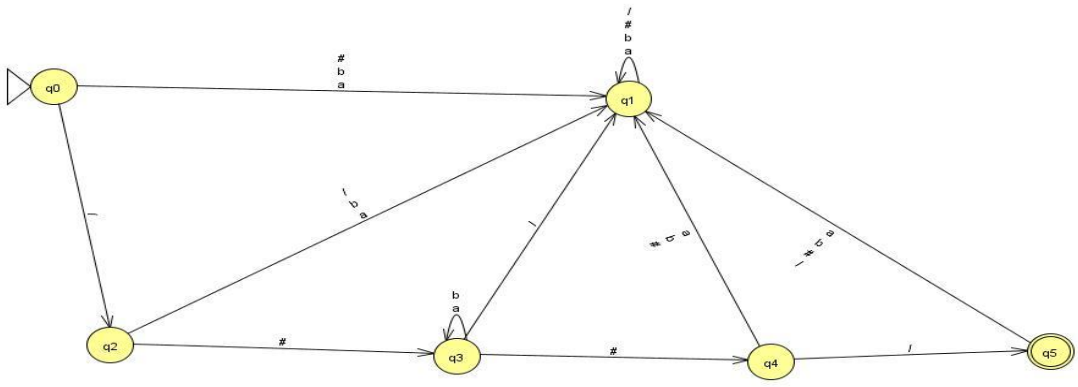


L = {w ∈ {a,b}* | w has a length of 3 and its 3 symbol is a}



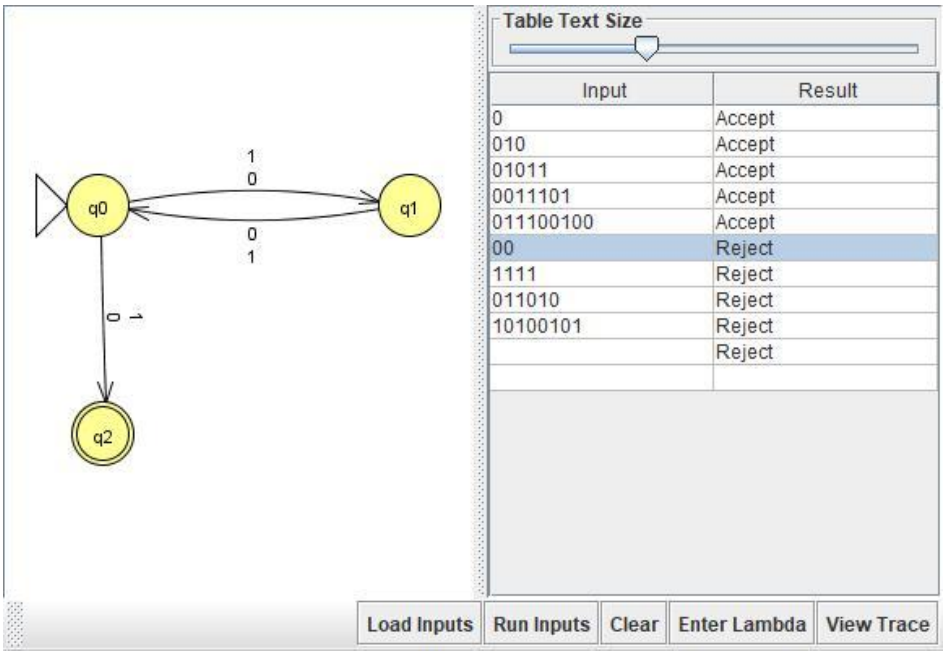
2.

L = { w ∈ {a, b, /, #}* | w starts with '/#' and ends with '#/' with no intervening '#/'}



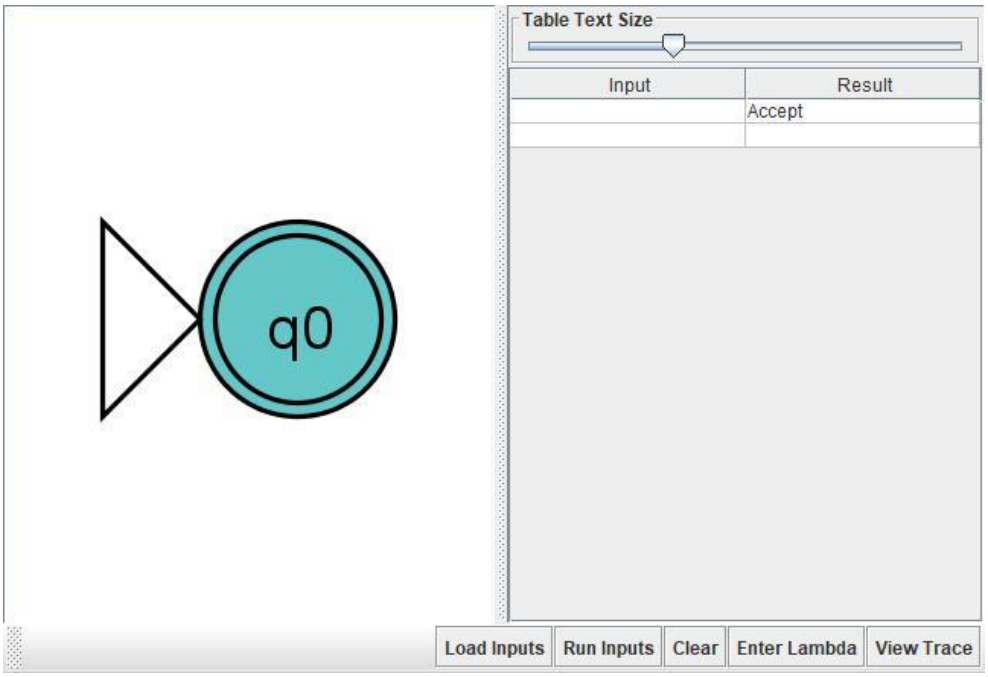
3.

a.

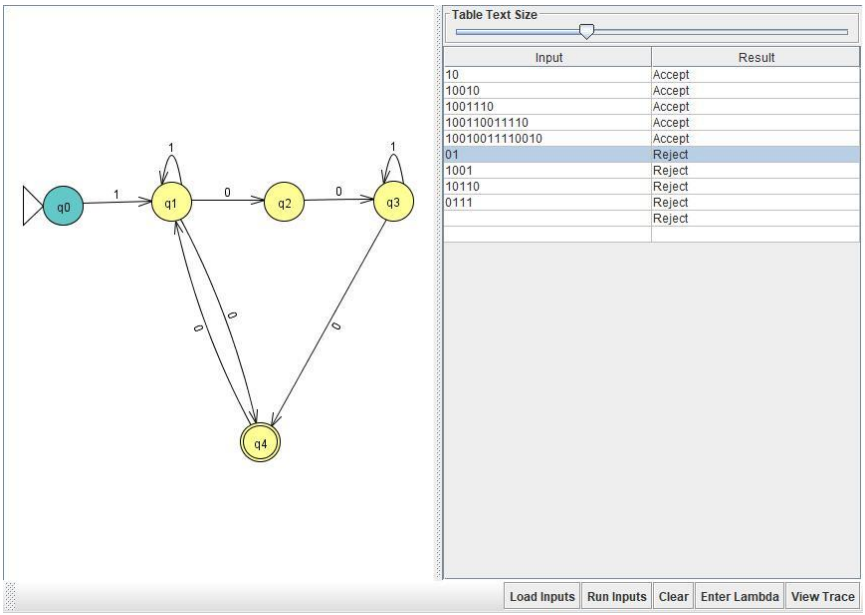


b.

Because there are 0 transitions and epsilon is the only string defined within this language, then there is only one input accepted which is epsilon.

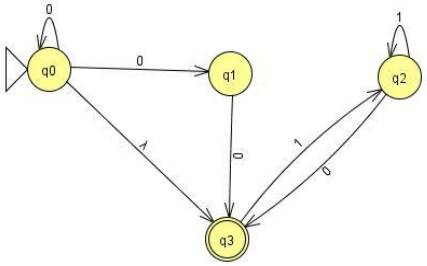


c.

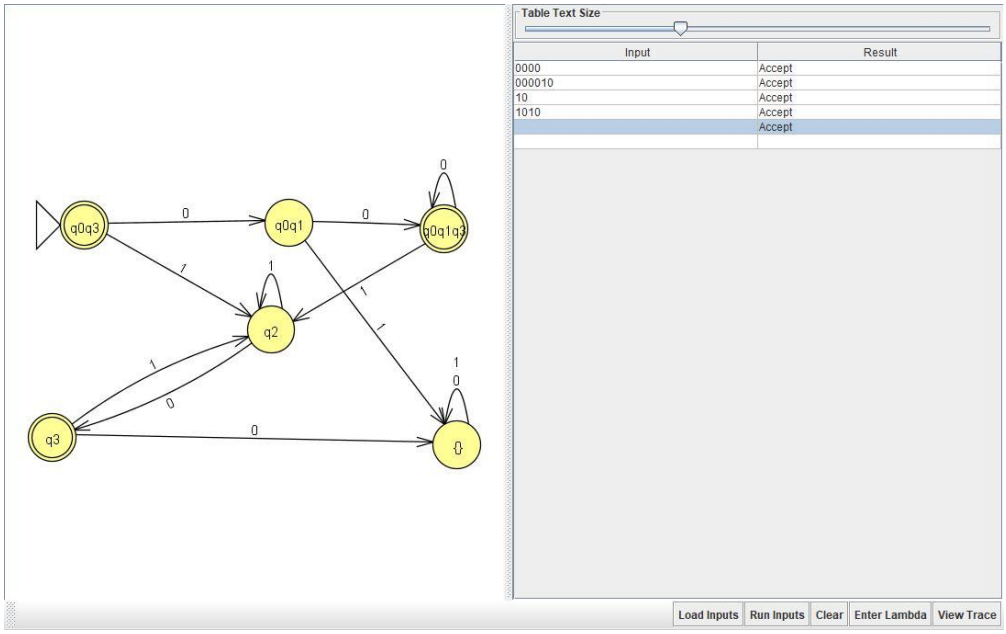

q0
q1
q2
q3
q4
1
0
Table Text Size
Input
Result
10
Accept
10010
Accept
1001110
Accept
100110011110
Accept
10010011110010
Accept
01
Reject
1001
Reject
10110
Reject
0111
Reject
Reject
Load Inputs
Run Inputs
Clear
Enter Lambda
View Trace

4.

a.

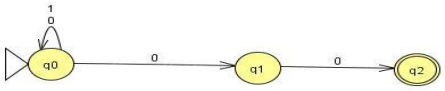

q0
q1
q2
q3
0
1

b.

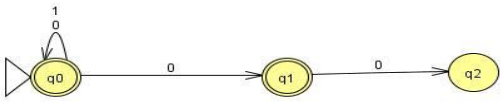


5.

L = { w ∈ {0,1}* | w ends with ’00’}



Taking the complement by changing its accept to non-accept and vice versa.



In this case we are not getting its complement.