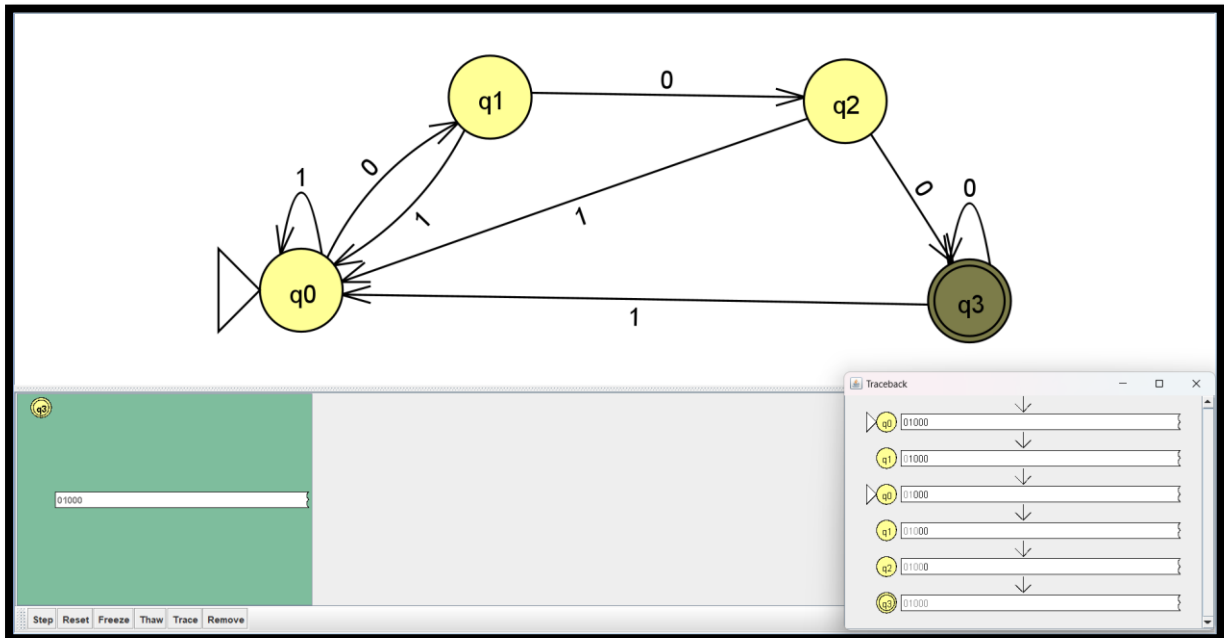
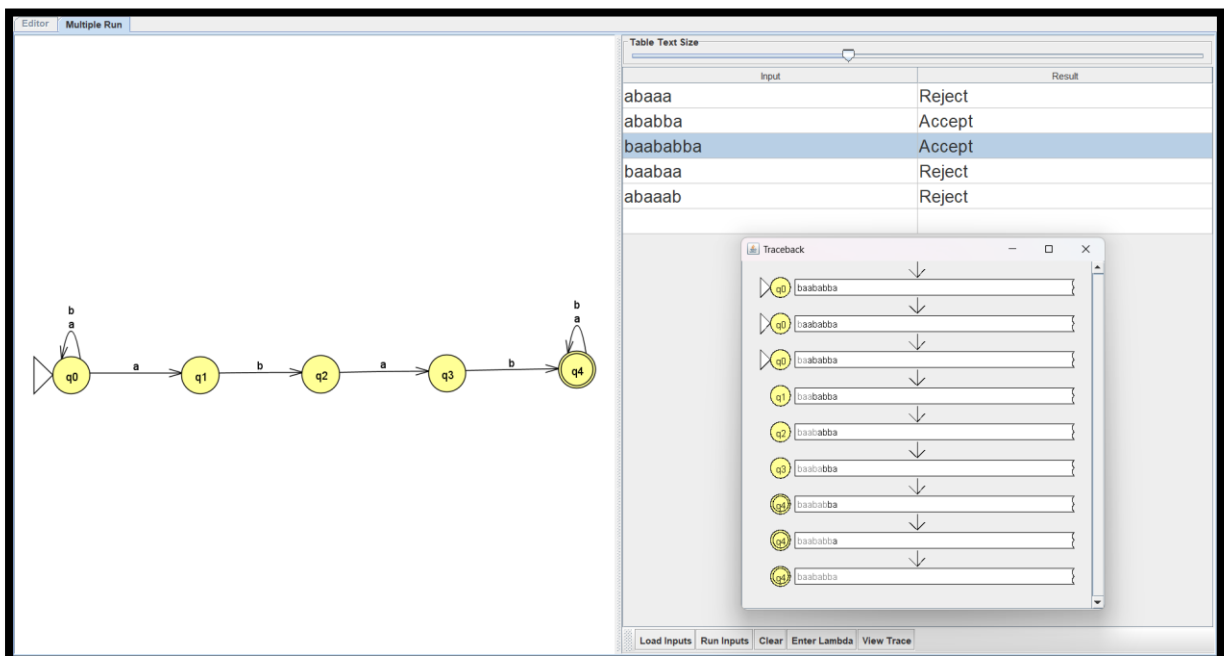


JFLAP Lab Works

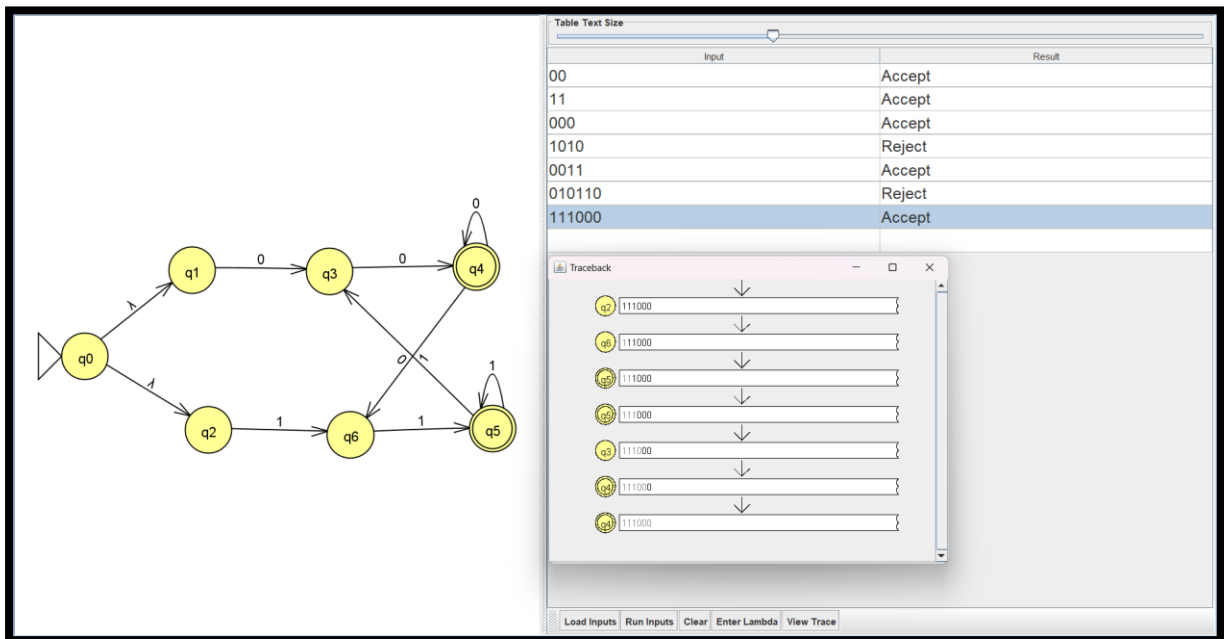
- DFA : Set of all string ending with three consecutive '0' over the alphabet $\{0,1\}$.



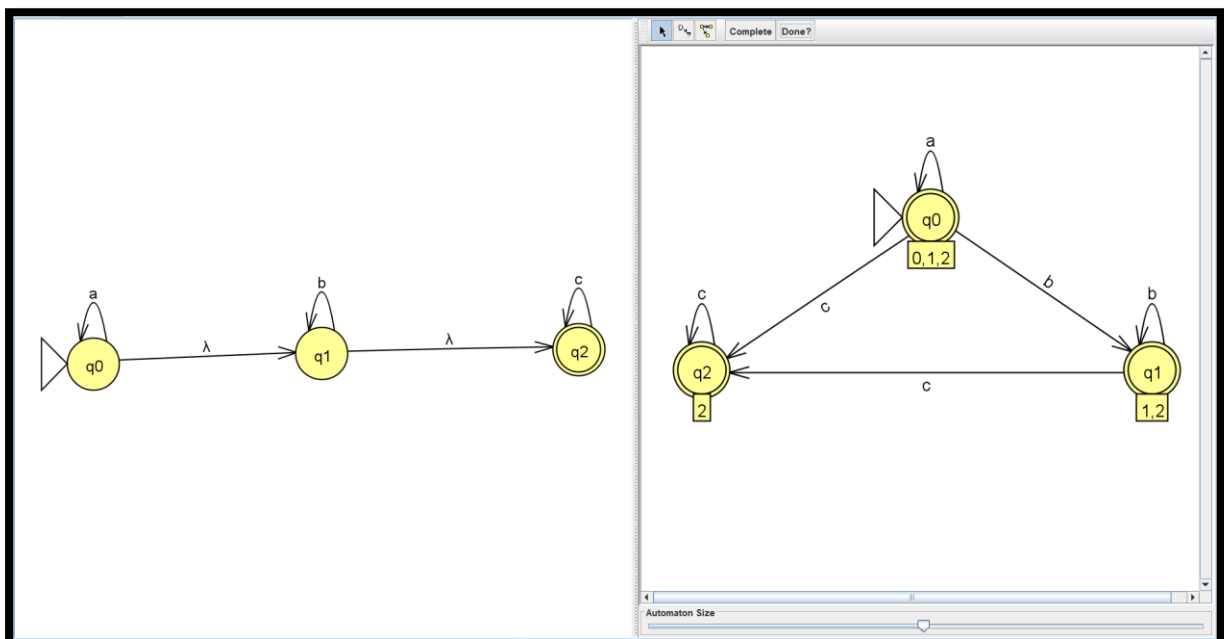
- NFA : Set of all string containing abab as a substring over the alphabet $\{a,b\}$.



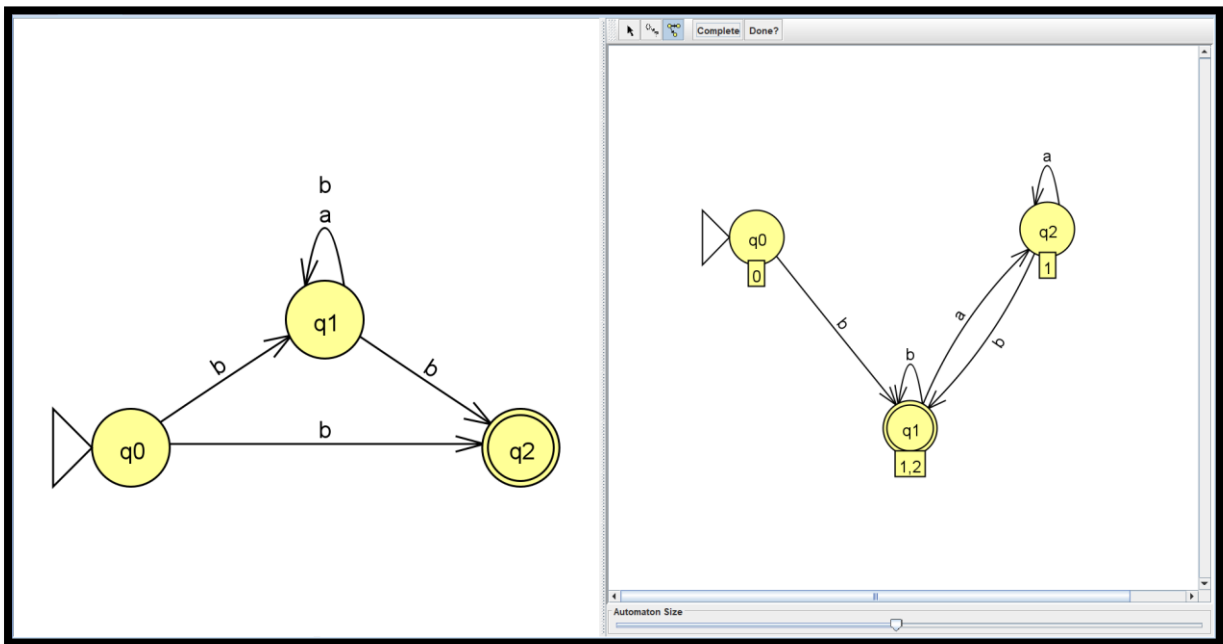
- ϵ -NFA : Starting or ending with 00 or 11 over alphabet= $\{0,1\}$.



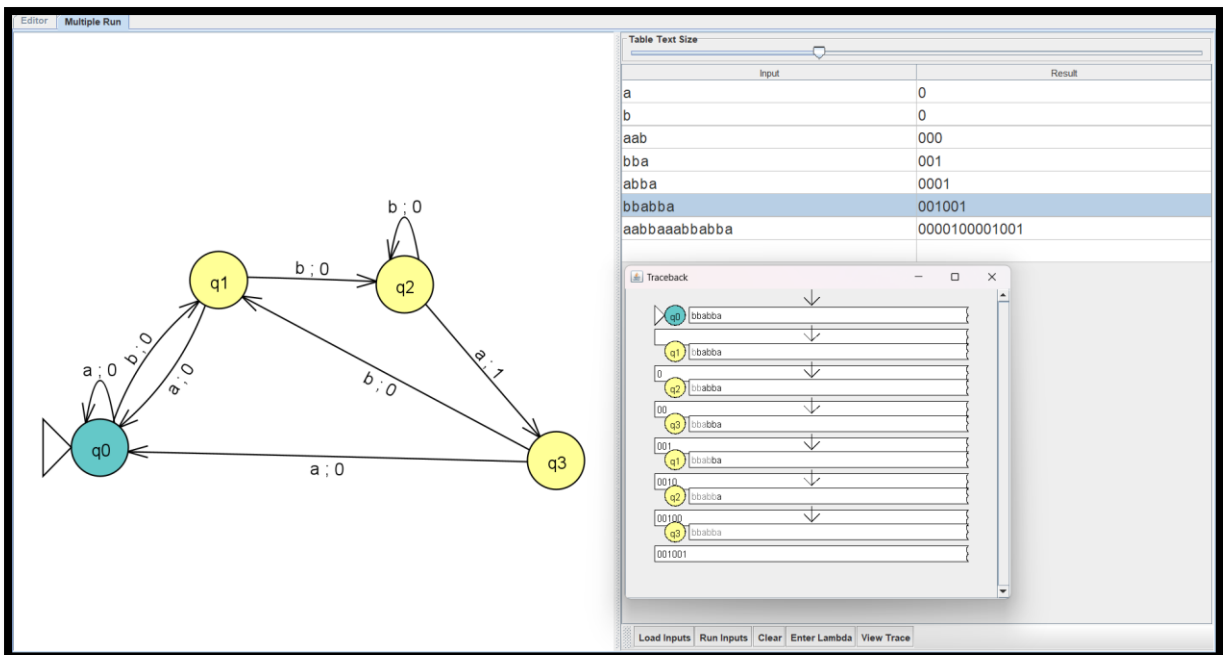
- Conversion of ϵ -NFA to DFA



- Conversion of NFA to DFA



- Mealy machine : Mealy Machine that counts the occurrence of substring 'bba' in input strings.



- [illegible]

- Editor Convert RE to NFA
- The automaton is complete.
"Export" will put it in a new window.
- Do Step Do All Export
-
- ```
graph LR
 q0((q0)) -- λ --> q2((q2))
 q2 -- λ --> q8((q8))
 q8 -- λ --> q10((q10))
 q10 -- a --> q11((q11))
 q11 -- λ --> q9((q9))
 q9 -- λ --> q3((q3))
 q3 -- λ --> q1((q1))
 q3 -- λ --> q2
 q3 -- λ --> q4((q4))
 q3 -- λ --> q5((q5))
 q4 -- a --> q5
 q5 -- λ --> q6((q6))
 q5 -- b --> q7((q7))
 q7 -- λ --> q1
 q8 -- λ --> q12((q12))
 q12 -- b --> q13((q13))
 q13 -- λ --> q9
```

- DFA to RE

JFLAP : <untitled5>

File Input Test View Convert Help

Editor Multiple Run

Table Text Size

| Input       | Result |
|-------------|--------|
| aaaaa       | Accept |
| baaabaa     | Accept |
| aaabbbaa    | Accept |
| aaaaabaa    | Accept |
| bbbbbaabbbb | Reject |

Traceback

q0 bbbbbbaabbbb

q0 bbbbbbaabbbb

q0 bbbbbbaabbbb

q0 bbbbbbaabbbb

q0 bbbbbbaabbbb

q0 bbbbbbaabbbb

q1 bbbbbbaabbbb

q0 bbbbbbaabbbb

q0 bbbbbbaabbbb

q0 bbbbbbaabbbb

q0 bbbbbbaabbbb

q0 bbbbbbaabbbb

q0 bbbbbbaabbbb

q0 bbbbbbaabbbb

- Conversion in RE

JFLAP : (odd a.jff)

File Input Test View Convert Help

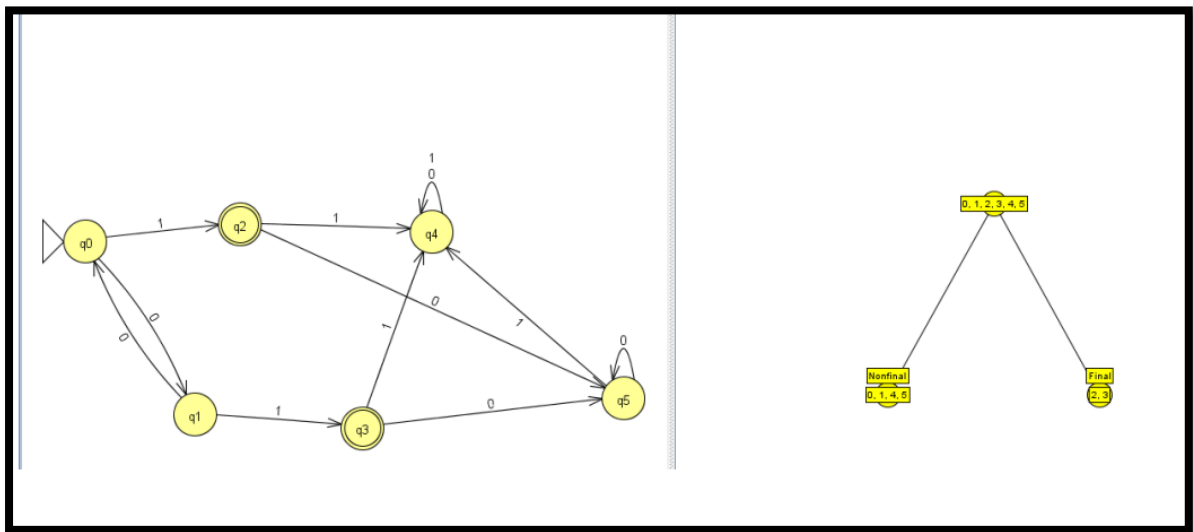
Editor Multiple Run Convert FA to RE Multiple Run

Generalized Transition Graph Finished!

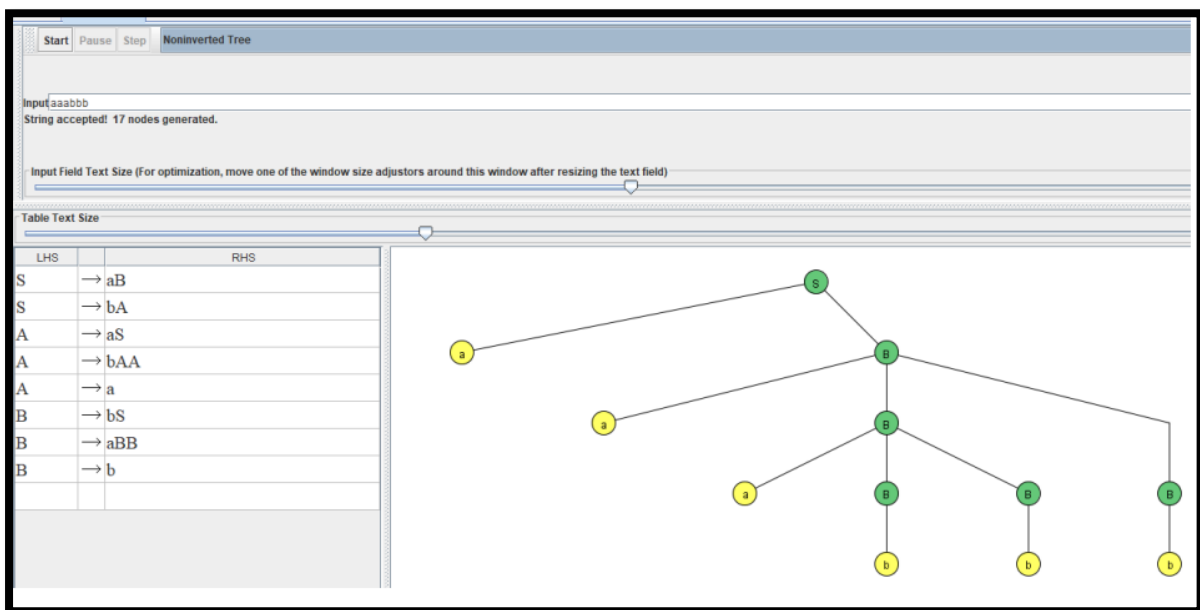
$(b^*ab^*a)^*b^*ab^*$

Do It Export

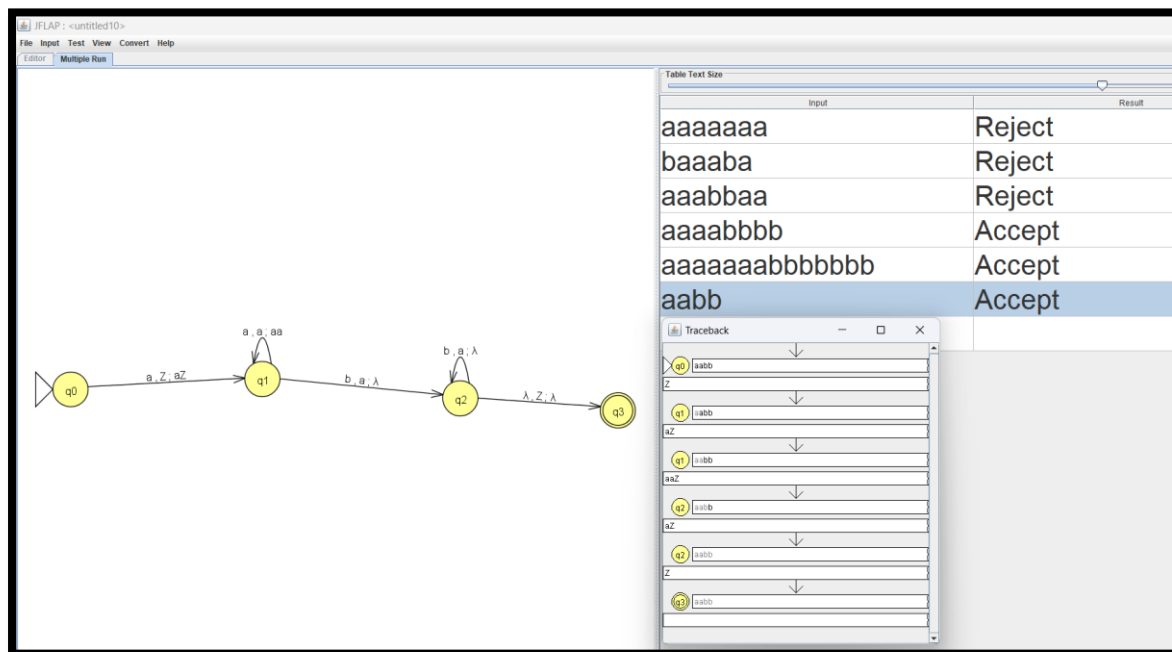
- Minimization of DFA



- Context Free Grammar



- PushDown Automata that accept  $0^N 1^N$ .



- Turing machine : Turing Machine that accept  $0^N 1^N$ .

