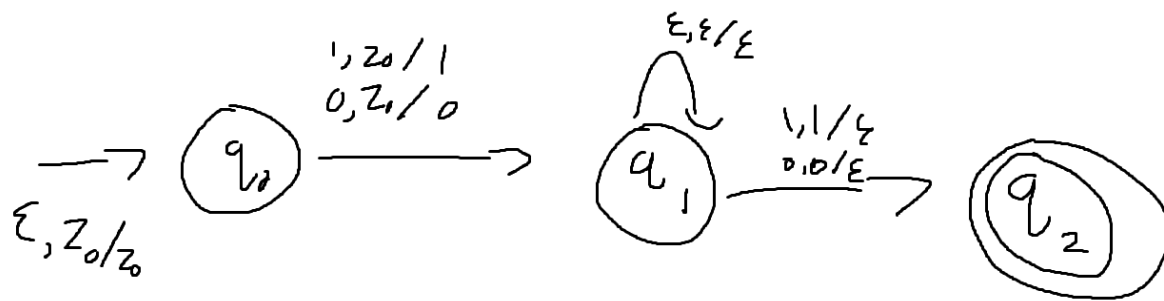


1a.

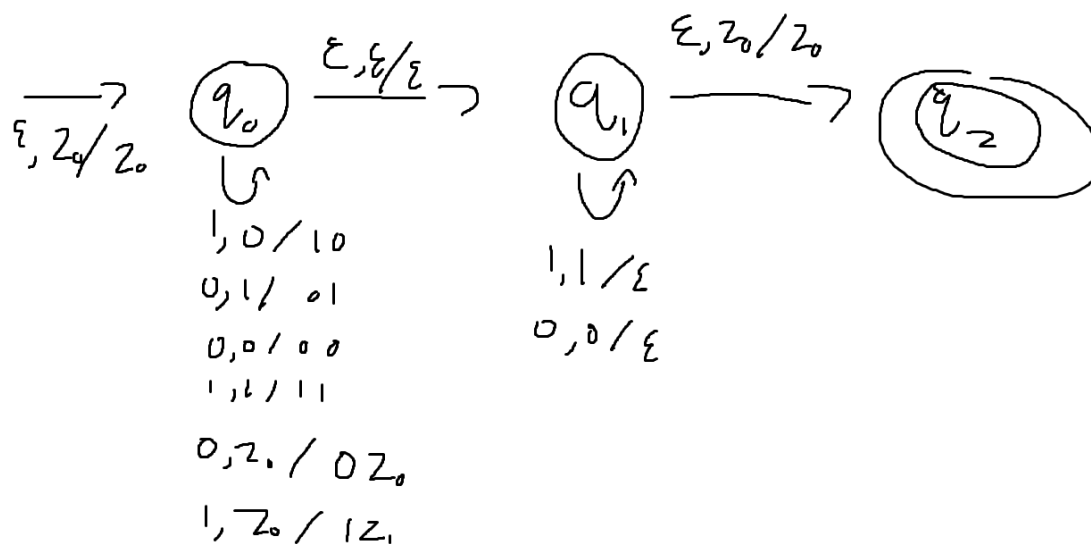


Z0 = empty stack

Q0 = Push

Q2 = Final State

1b.

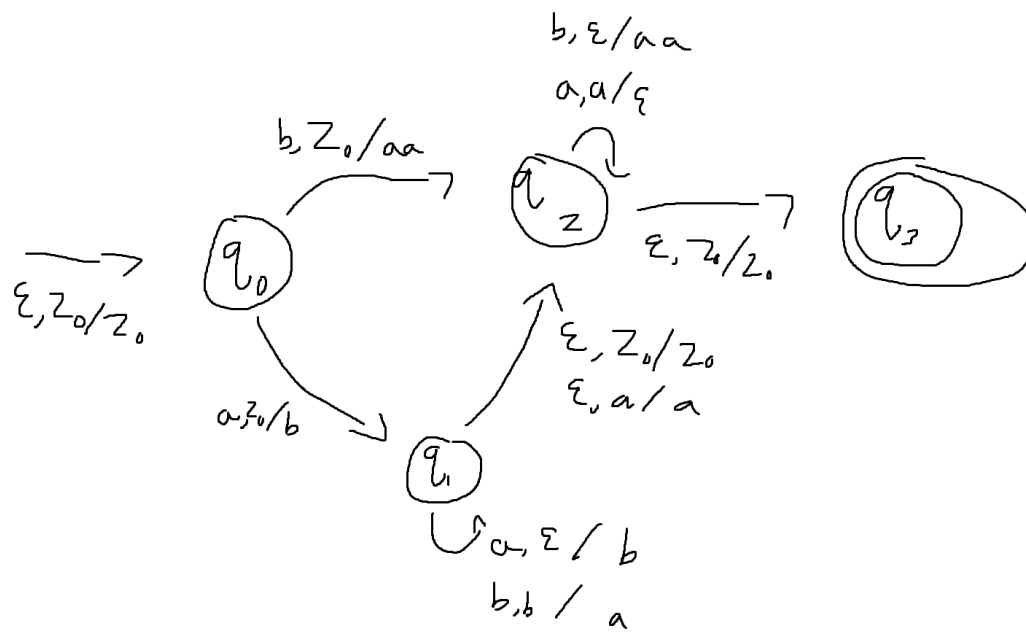


Z0 = empty stack

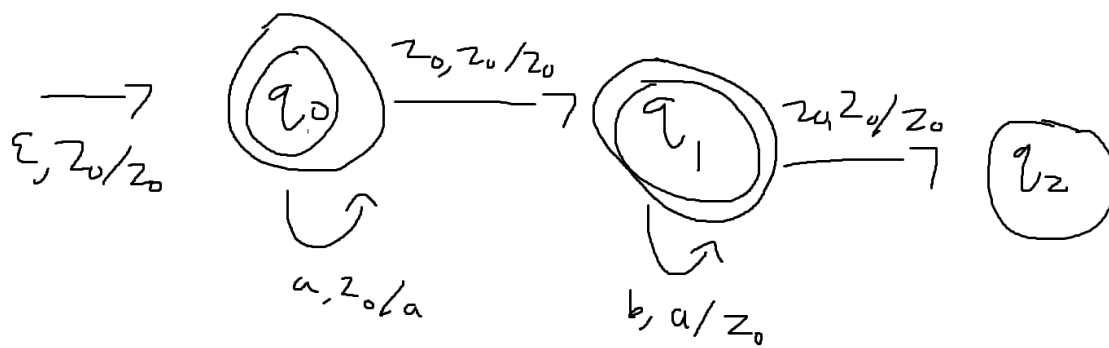
Q0 = Push

Q2 = Final State

2.



3.



4.

$\xrightarrow{\quad}$
 $a.s/s$



$a, a / \epsilon$

$b, b / \epsilon$

$\epsilon, Y / bY$

$\epsilon, Y / aY$

$\epsilon, Y / \epsilon$

$\epsilon, S / aSb$

$\epsilon, S / bY$

$\epsilon, S / Ya$