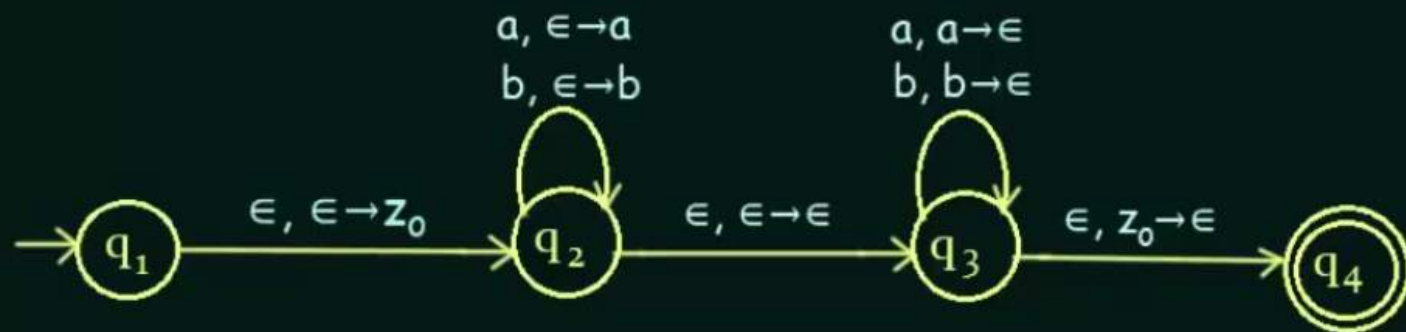


## L2.2 Automata Example (Even Palindrome) PART-2

## Pushdown Automata - Example (Even Palindrome) PART- 2

Construct a PDA that accepts Even Palindromes of the form

$$L = \{ ww^R \mid w = (a+b)^+ \}$$

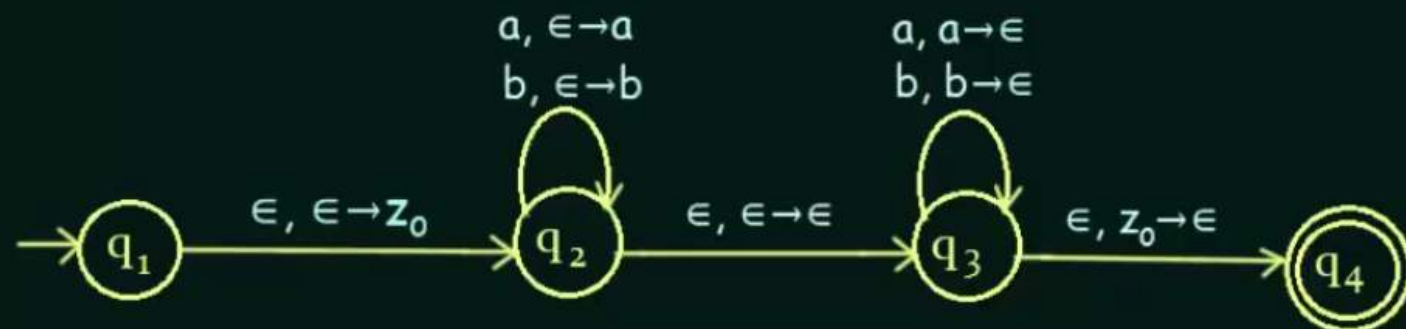


Example: a b b a

## Pushdown Automata - Example (Even Palindrome) PART- 2

Construct a PDA that accepts Even Palindromes of the form

$$L = \{ ww^R \mid w = (a+b)^+ \}$$



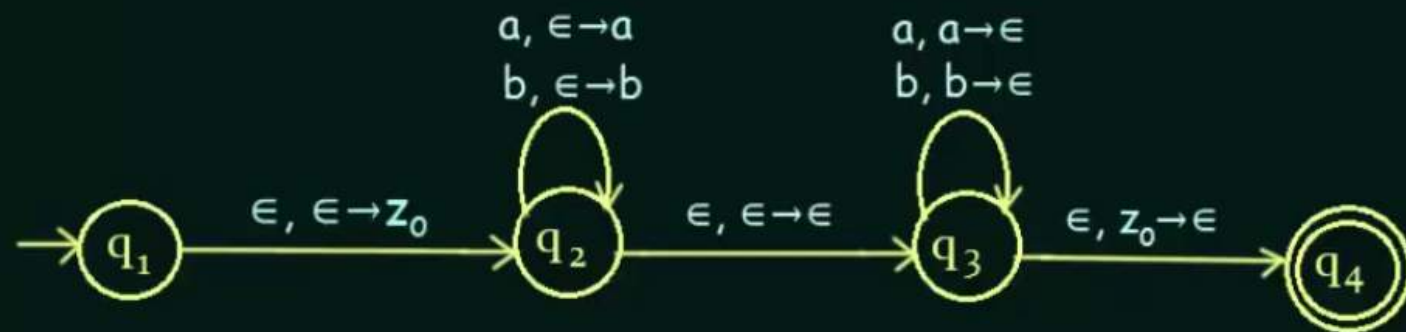
Example: a b b a



## Pushdown Automata - Example (Even Palindrome) PART- 2

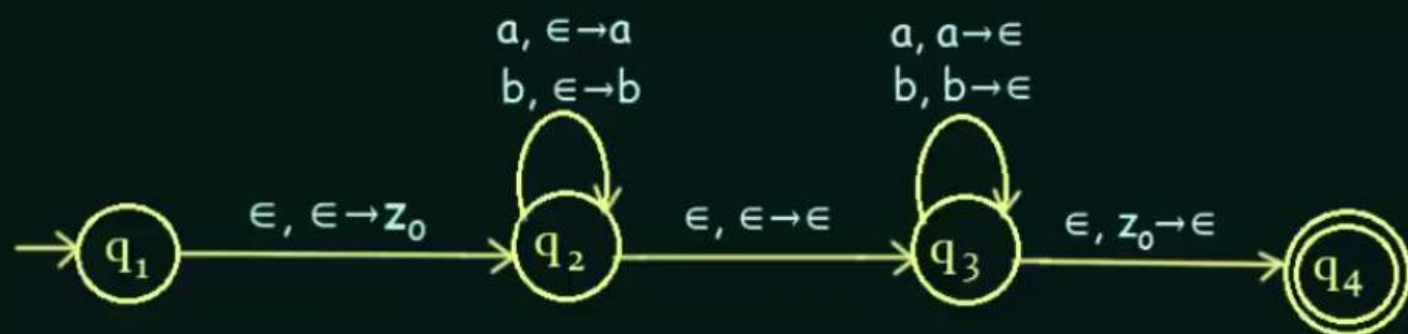
Construct a PDA that accepts Even Palindromes of the form

$$L = \{ ww^R \mid w = (a+b)^+ \}$$

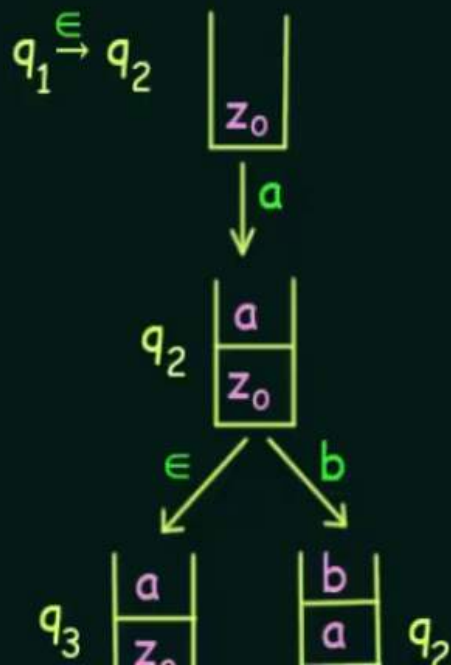


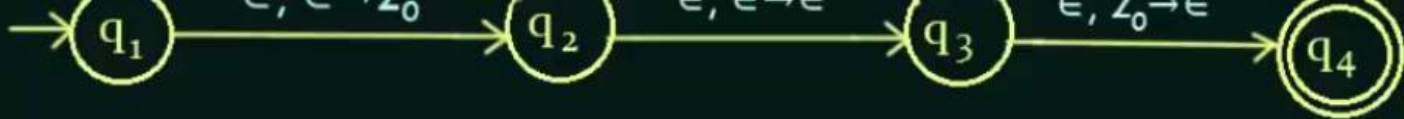
Example:  $\epsilon a \epsilon b \epsilon b \epsilon a \epsilon$



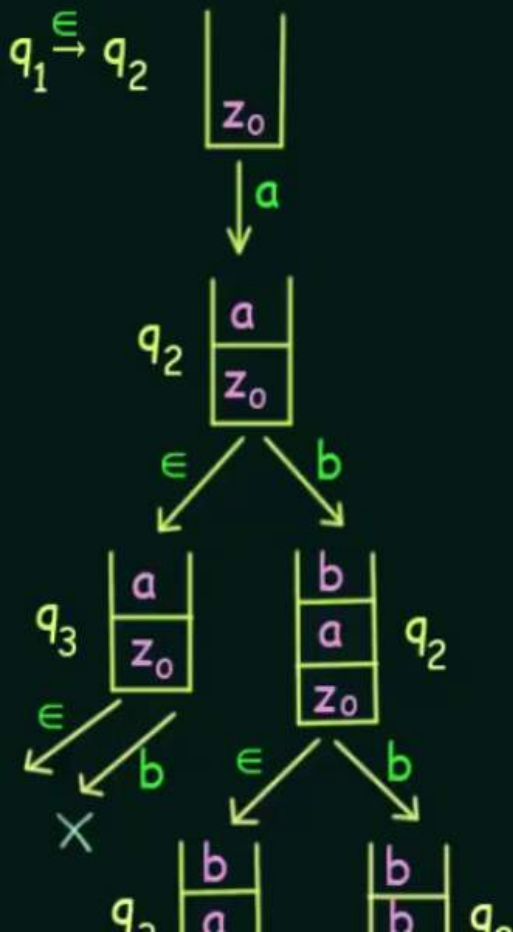


Example:  $\epsilon a \epsilon b \epsilon b \epsilon a \epsilon$

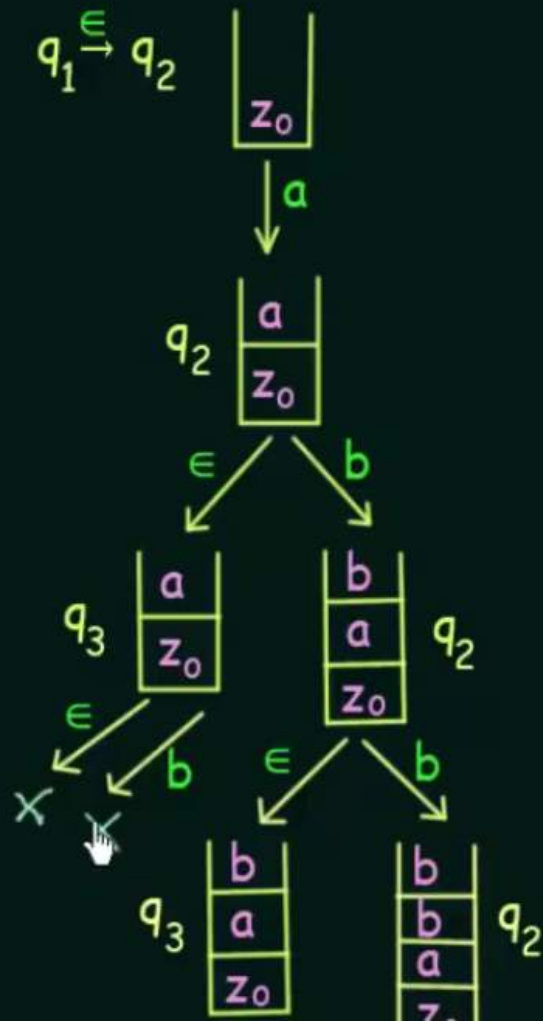


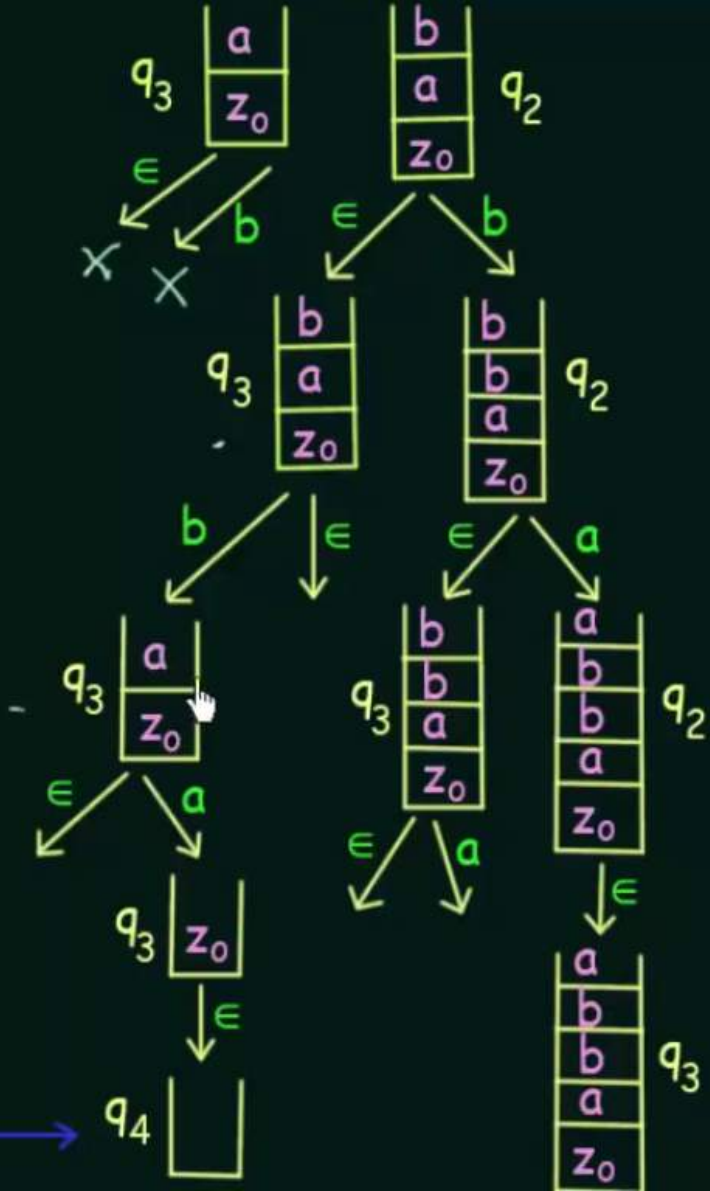


Example:  $\epsilon a \epsilon b \epsilon b \epsilon a \epsilon$



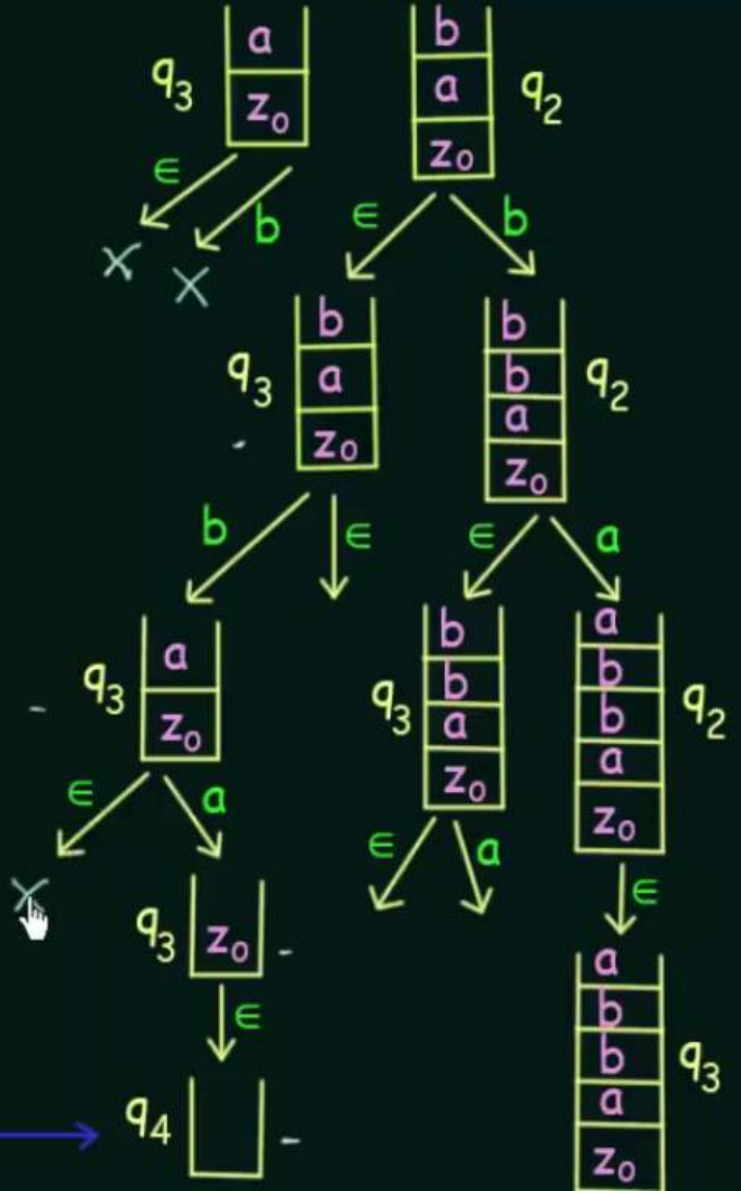
Example:  $\epsilon a \epsilon b \epsilon b \epsilon a \epsilon$





Final State  $\rightarrow q_4$

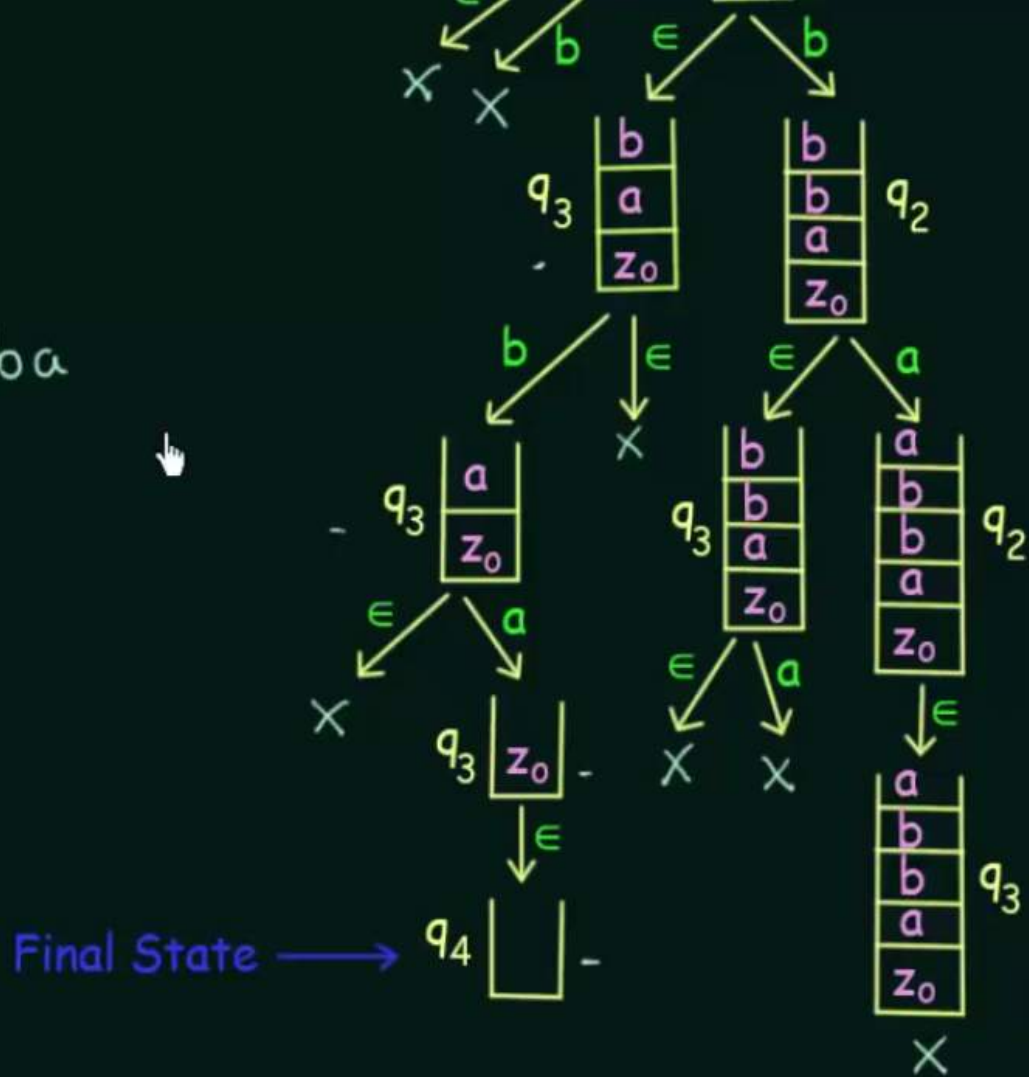




Final State  $\rightarrow$



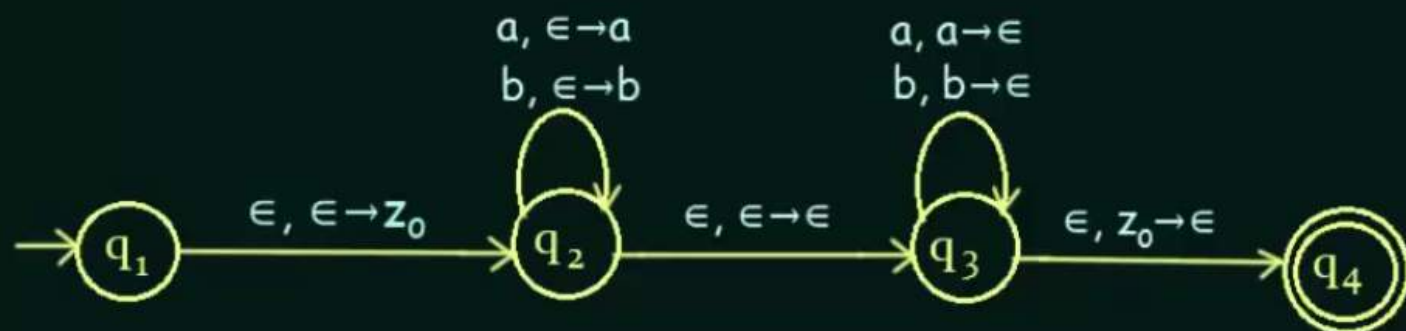
abεba



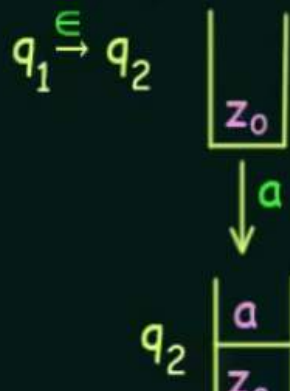
## Pushdown Automata - Example (Even Palindrome) PART- 2

Construct a PDA that accepts Even Palindromes of the form

$$L = \{ ww^R \mid w = (a+b)^+ \}$$



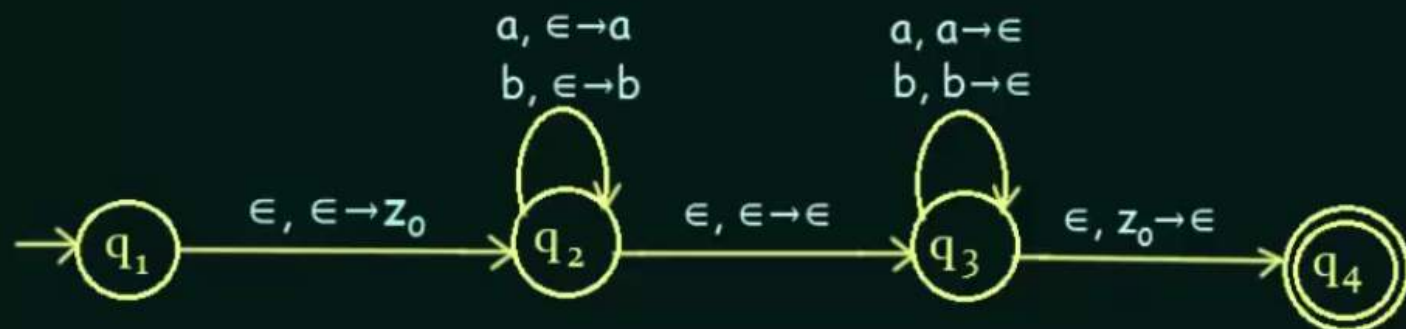
Example:  $\epsilon a \epsilon b \epsilon b \epsilon a \epsilon$



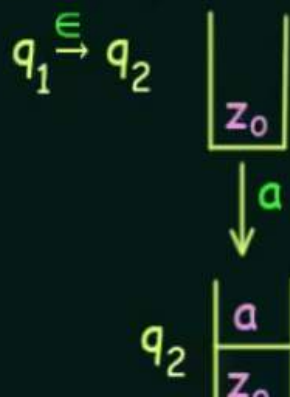
## Pushdown Automata - Example (Even Palindrome) PART- 2

Construct a PDA that accepts Even Palindromes of the form

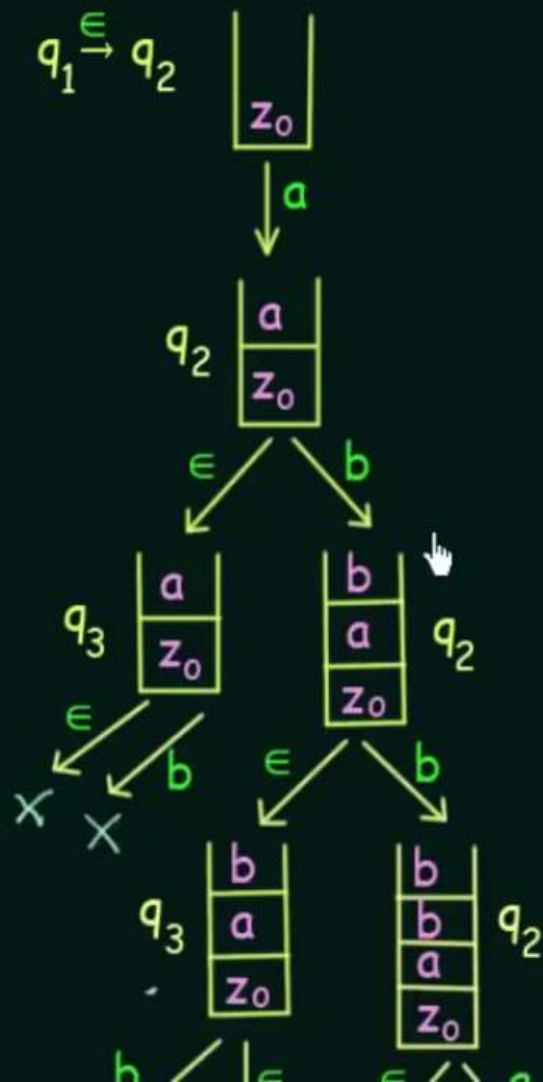
$$L = \{ ww^R \mid w = (a+b)^+ \}$$



Example:  $\epsilon a \epsilon b \epsilon b \epsilon a \epsilon$

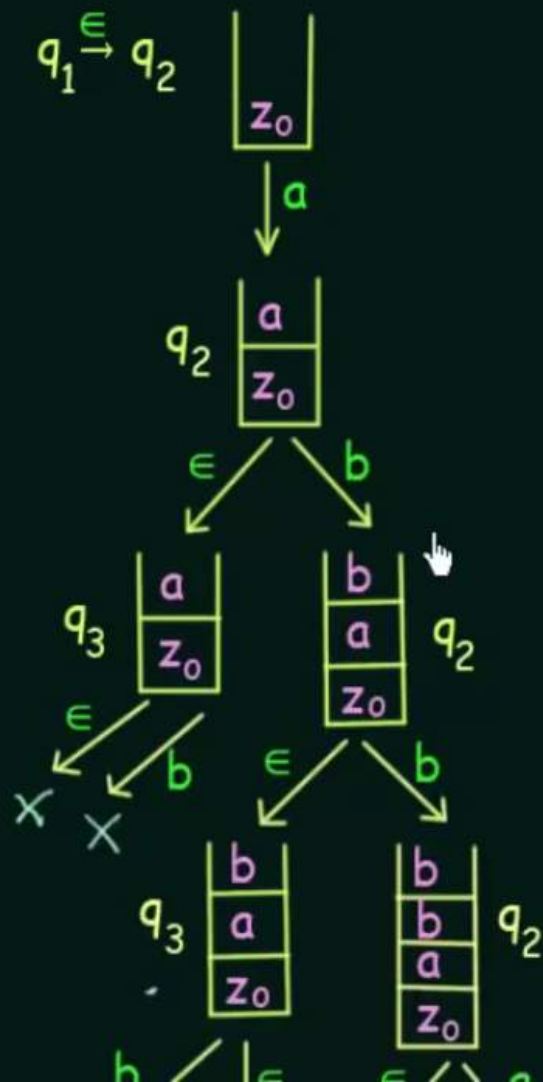


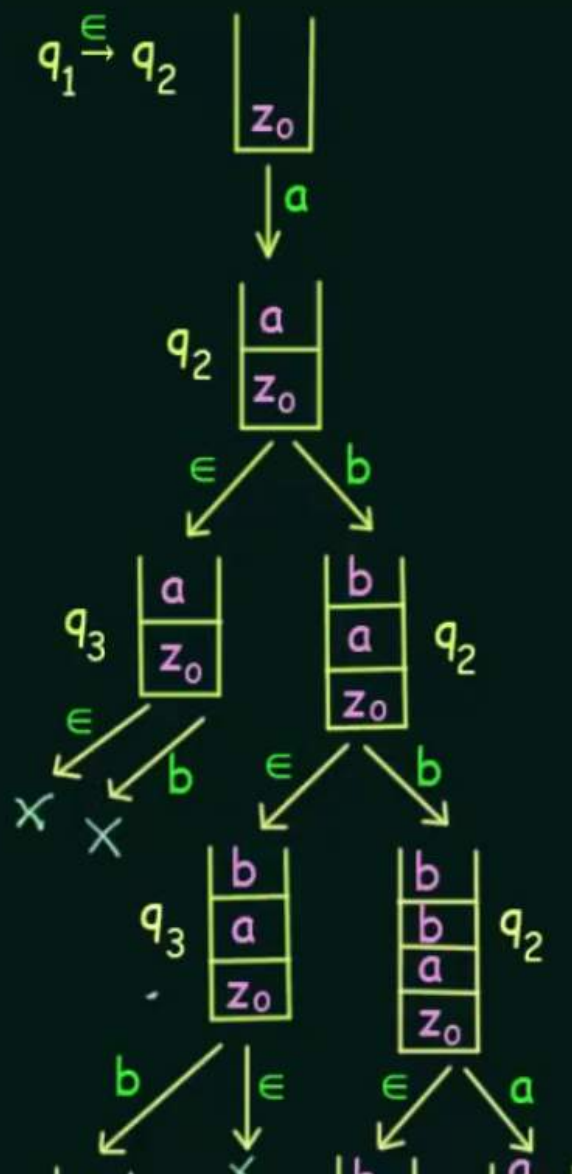
Example:  $\epsilon a \epsilon b \epsilon b \epsilon a \epsilon$  ✓



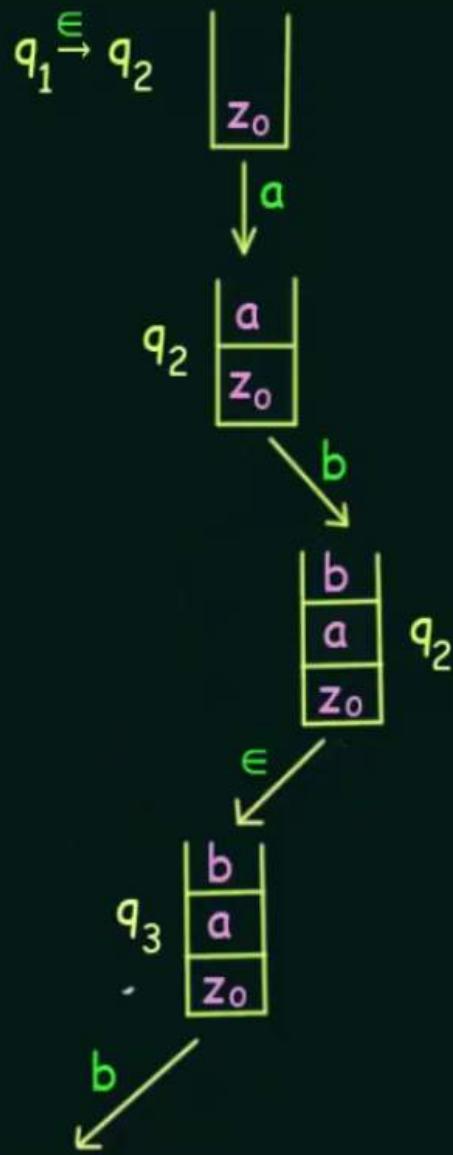
abcbca

Example:  $\epsilon a \epsilon b \epsilon b \epsilon a \epsilon$  ✓





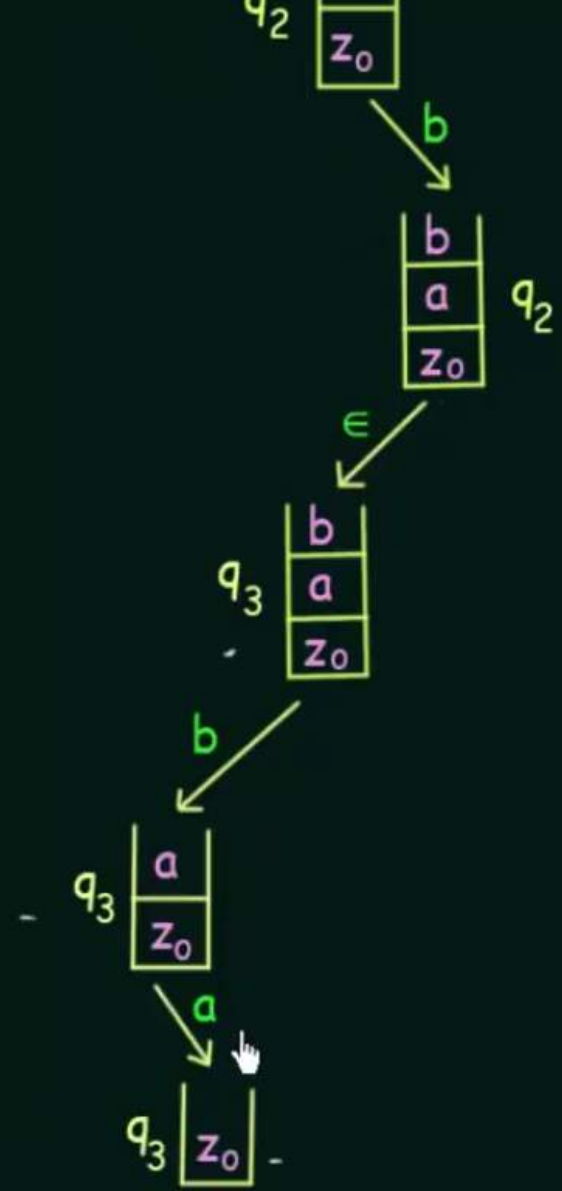
$ab\epsilon ba$



$ab\epsilon ba$



$ab\epsilon ba$



$ab\epsilon ba$

