

Construct a **PDA** that accepts the language by **empty stacks**:

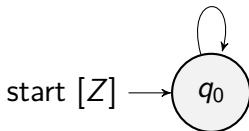
$$L_E(P) = \{w \in \{ (, ) \}^* \mid w \text{ is balanced} \}$$

Word  $w =$  ( ( ) ( ( ) ) ) ( )

Stack  $\alpha =$ 

						Z
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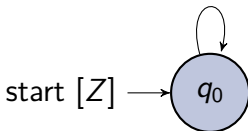
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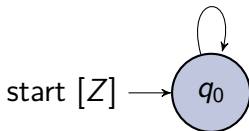
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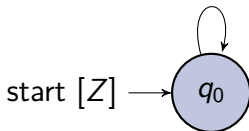
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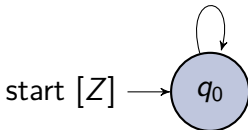
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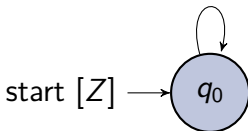
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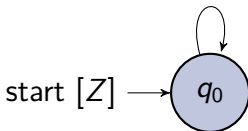
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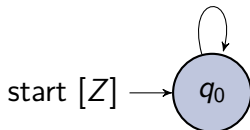
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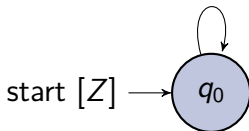
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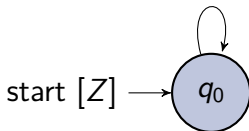
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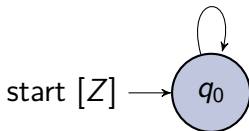
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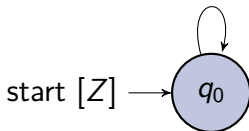
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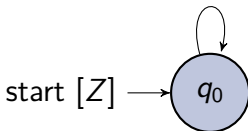
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$((()()))() \in L_E(P)!$