

Construct a **PDA** that accepts the language by **final states**:

$$L_F(P) = \{ww^R \mid w \in \{a, b\}^*\}$$

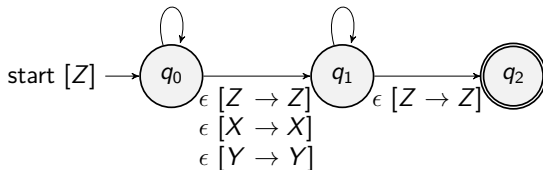
Word $w =$ a b a a b b a a b a

Stack $\alpha =$

							Z
--	--	--	--	--	--	--	---

$P =$

a	$[Z \rightarrow XZ]$	
a	$[X \rightarrow XX]$	
a	$[Y \rightarrow XY]$	
b	$[Z \rightarrow YZ]$	
b	$[X \rightarrow YX]$	$a [X \rightarrow \epsilon]$
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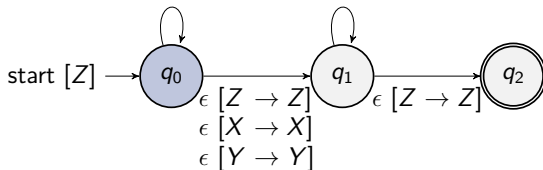
a	b	a	a	b	b	a	a	b	a
---	---	---	---	---	---	---	---	---	---

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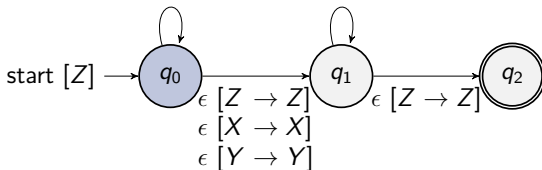
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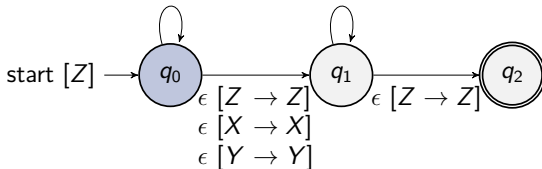
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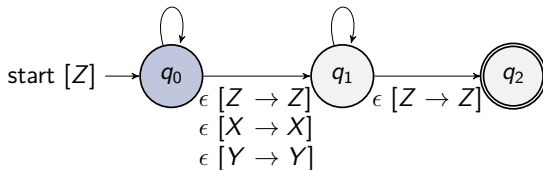
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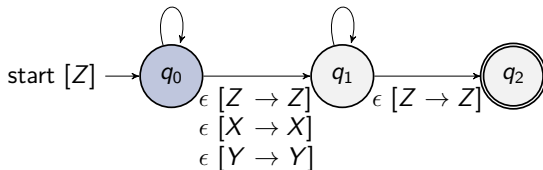
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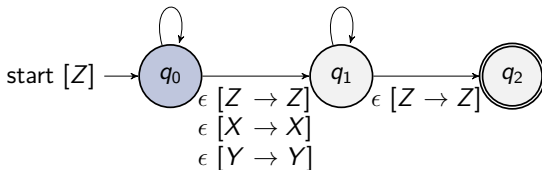
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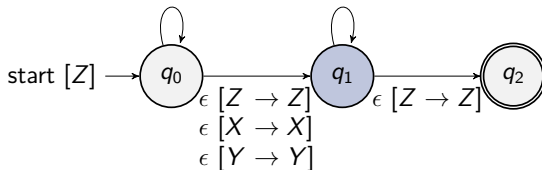
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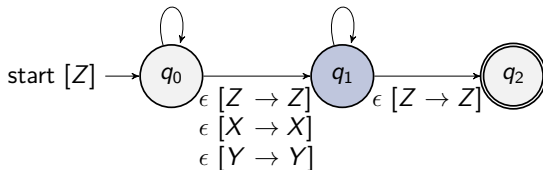
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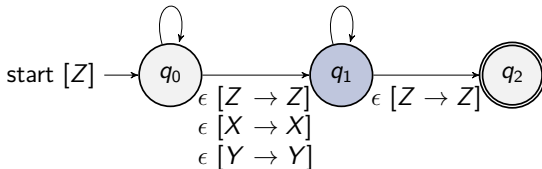
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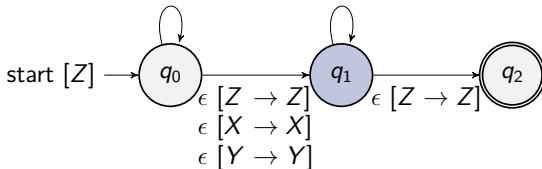
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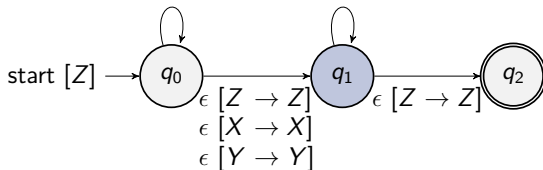
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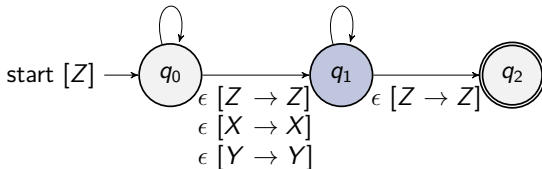
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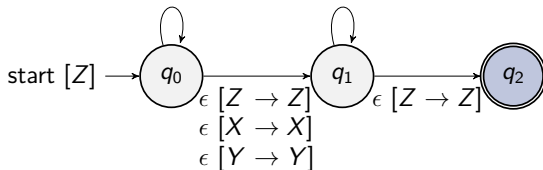
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abaabbaaba $\in L_F(P)$!