

L7-NFA-Example-2

NFA - Example-2

$L = \{ \text{Set of all strings that start with 0} \}$



NFA - Example-2

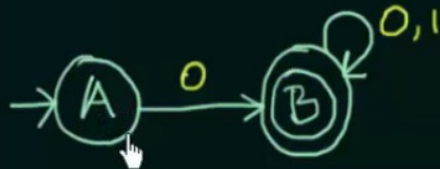
$L = \{ \text{Set of all strings that start with 0} \}$
 $= \{ 0, 00, 01, 000, \dots \}$

A



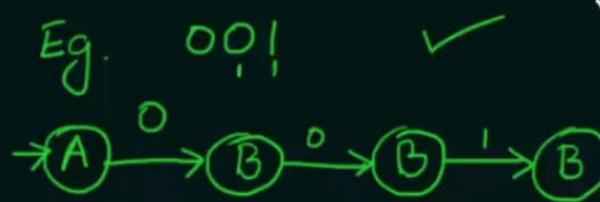
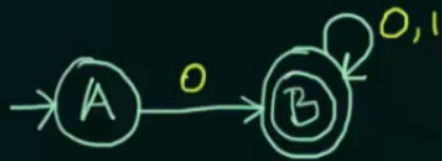
NFA - Example-2

$L = \{ \text{Set of all strings that start with 0} \}$
 $= \{ 0, 00, 01, 000, \dots \}$



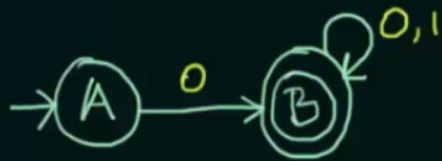
NFA - Example-2

$L = \{ \text{Set of all strings that start with 0} \}$
 $= \{ 0, 00, 01, 000, \dots \}$



NFA - Example-2

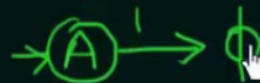
$L = \{ \text{Set of all strings that start with 0} \}$
 $= \{ 0, 00, 01, 000, \dots \}$



Eg. 001 ✓



Eg. 101 X

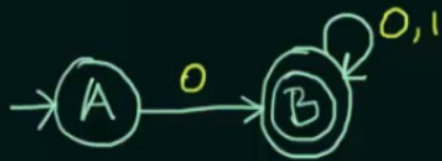


Dead configuration



NFA - Example-2

$L = \{ \text{Set of all strings that start with 0} \}$
 $= \{ 0, 00, 01, 000, \dots \}$



Eg. 001 ✓



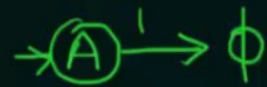
Eg. 101 ✗



>> Construct a NFA that accepts sets of all strings over $\{0,1\}$ of length 2



Eg. 101 X

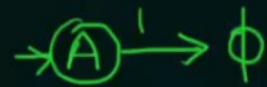


Dead configuration

>> Construct a NFA that accepts sets of all strings over $\{0,1\}$ of length 2



Eg. 101 X

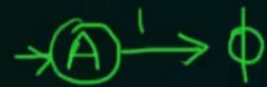


Dead configuration

>> Construct a NFA that accepts sets of all strings over $\{0,1\}$ of length 2



Eg. 101 X



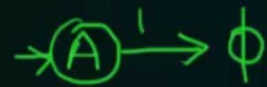
Dead configuration

>> Construct a NFA that accepts sets of all strings over $\{0,1\}$ of length 2

$$\Sigma = \{0,1\}$$



Eg. 101 X



Dead configuration

>> Construct a NFA that accepts sets of all strings over $\{0,1\}$ of length 2

$$\Sigma = \{0,1\}$$

$$L = \{00, 01, 10, 11\}$$



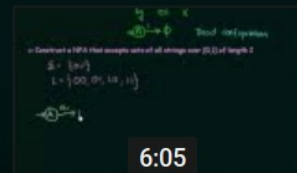
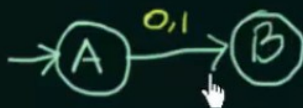
NFA Examples (Part 2)

Eg. 101 X
 $\rightarrow \textcircled{A} \xrightarrow{1} \emptyset$ Dead configuration

>> Construct a NFA that accepts sets of all strings over $\{0,1\}$ of length 2

$$\Sigma = \{0,1\}$$

$$L = \{00, 01, 10, 11\}$$



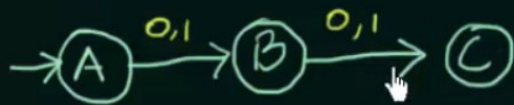
NFA Examples (Part 2)

Eg. 101 X
 $\rightarrow \textcircled{A} \xrightarrow{1} \emptyset$ Dead configuration

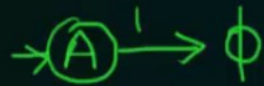
>> Construct a NFA that accepts sets of all strings over $\{0,1\}$ of length 2

$$\Sigma = \{0,1\}$$

$$L = \{00, 01, 10, 11\}$$



Eg. 101 X

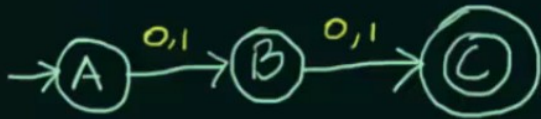


Dead configuration

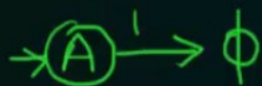
>> Construct a NFA that accepts sets of all strings over $\{0,1\}$ of length 2

$$\Sigma = \{0,1\}$$

$$L = \{00, 01, 10, 11\}$$



Eg. 101 X

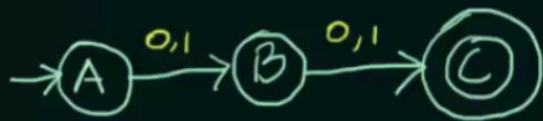


Dead configuration

>> Construct a NFA that accepts sets of all strings over $\{0,1\}$ of length 2

$\Sigma = \{0,1\}$

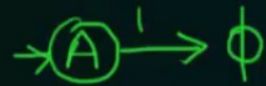
$L = \{00, 01, 10, 11\}$



Eg. 00



Eg. 101 X

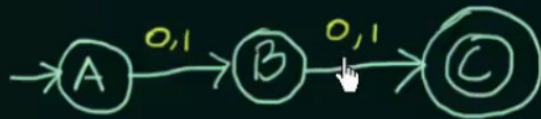


Dead configuration

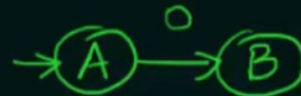
>> Construct a NFA that accepts sets of all strings over $\{0,1\}$ of length 2

$\Sigma = \{0,1\}$

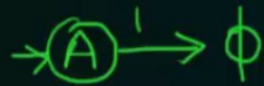
$L = \{00, 01, 10, 11\}$



Eg. 00



Eg. 101 X

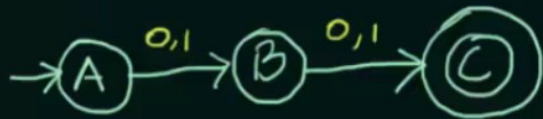


Dead configuration

>> Construct a NFA that accepts sets of all strings over $\{0,1\}$ of length 2

$\Sigma = \{0,1\}$

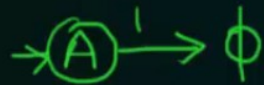
$L = \{00, 01, 10, 11\}$



Eg. 00 ✓



Eg. 101 X

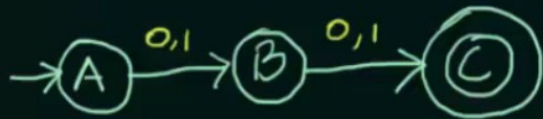


Dead configuration

>> Construct a NFA that accepts sets of all strings over $\{0,1\}$ of length 2

$\Sigma = \{0,1\}$

$L = \{00, 01, 10, 11\}$



Eg. 00 ✓



Eg. 001 X



• **Questions????**