

# NFA-DFA Conversion Example-4

## Conversion of NFA to DFA - Examples (Part-4)

Design an NFA for a language that accepts all strings over  $\{0,1\}$  in which the second last symbol is always '1'. Then convert it to its equivalent DFA.



## Conversion of NFA to DFA - Examples (Part-4)

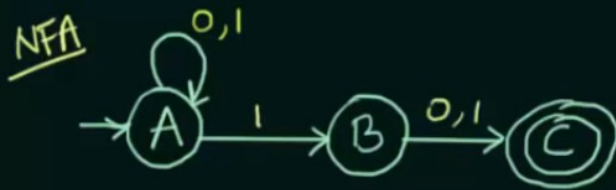
Design an NFA for a language that accepts all strings over  $\{0,1\}$  in which the second last symbol is always '1'. Then convert it to its equivalent DFA.

Eg. 1010  
110  
1101010



## Conversion of NFA to DFA - Examples (Part-4)

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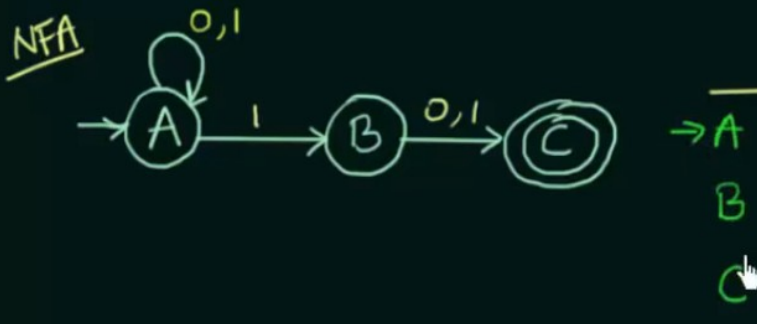
Eg. 1010  
110  
1101010



## Conversion of NFA to DFA - Examples (Part-4)

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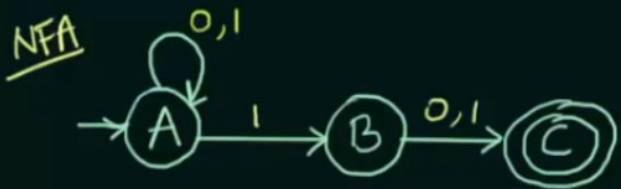
Eg. 1010  
110  
1101010



## Conversion of NFA to DFA - Examples (Part-4)

Design an NFA for a language that accepts all strings over  $\{0,1\}$  in which the second last symbol is always '1'. Then convert it to its equivalent DFA.

Eg. 1010  
110  
1101010



	0	1
A	A	A, B
B		
C		



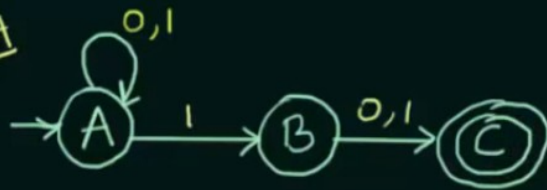
## Conversion of NFA to DFA - Examples (Part-4)



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Eg. 1010  
 110  
 1101010

NFA

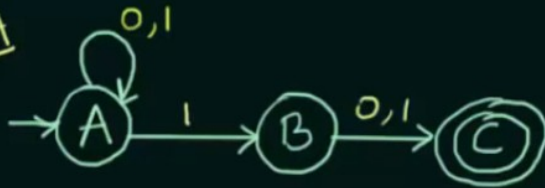


	0	1
→ A	A	A, B
B	C	C
C	C	C

## Conversion of NFA to DFA - Examples (Part-4)

Design an NFA for a language that accepts all strings over  $\{0,1\}$  in which the second last symbol is always '1'. Then convert it to its equivalent DFA.

Eg. 1010  
110  
1101010



	0	1
A	A	A, B
B	C	C
C	$\phi$	$\phi$

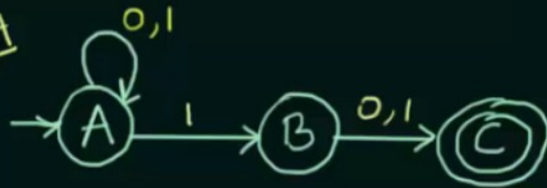




Design an NFA for a language that accepts all strings over  $\{0,1\}$  in which the second last symbol is always '1'. Then convert it to its equivalent DFA.

Eg. 1010  
 110  
 1101010

NFA



	0	1
→ A	A	A, B
B	C	C
C	$\phi$	$\phi$

DFA

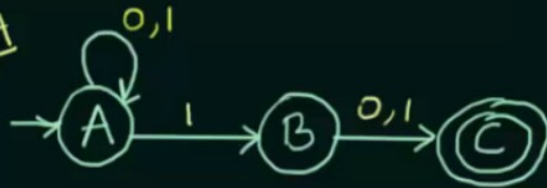
	0	1
→ A		



Design an NFA for a language that accepts all strings over  $\{0,1\}$  in which the second last symbol is always '1'. Then convert it to its equivalent DFA.

Eg. 1010  
 110  
 1101010

NFA



	0	1
→ A	A	A, B
B	C	C
C	φ	φ

DFA

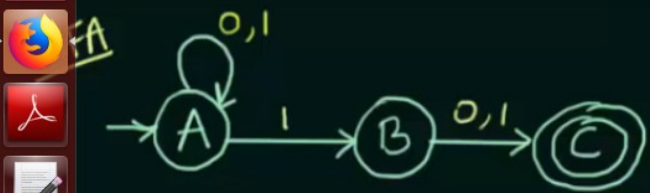
	0	1
→ A	A	AB



# Conversion of NFA to DFA - Examples (Part 4)

second last symbol is always '1'. Then convert it to its equivalent DFA.

Eg. 1010  
110  
1101010



	0	1
→ A	A	A, B
B	C	C
C	φ	φ

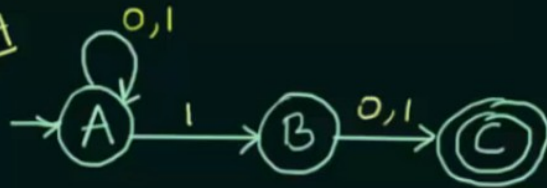
NFA

	0	1
→ A	A	AB
AB		

Design an NFA for a language that accepts all strings over  $\{0,1\}$  in which the second last symbol is always '1'. Then convert it to its equivalent DFA.

Eg. 1010  
 110  
 1101010

NFA



	0	1
→ A	A	A, B
B	C	C
C	$\phi$	$\phi$

DFA

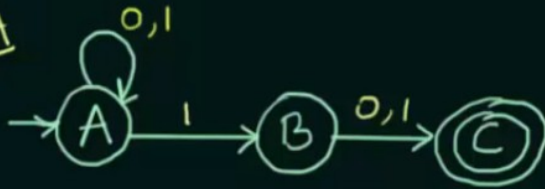
	0	1
→ A	A	AB
AB	AC	ABC



second last symbol is always 1. Then convert it to its equivalent DFA.

Eg. 1010  
110  
1101010

NFA



	0	1
→ A	A	A, B
B	C	C
C	φ	φ

DFA

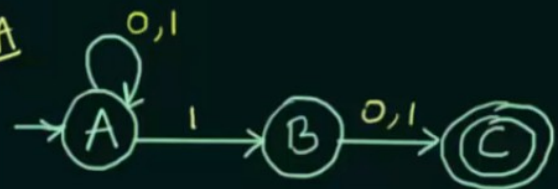
	0	1
→ A	A	AB
AB	AC	ABC
AC		



second last symbol is always 1. Then convert it to its equivalent DFA.

Eg. 1010  
 110  
 1101010

NFA



	0	1
→ A	A	A, B
B	C	C
C	φ	φ

DFA

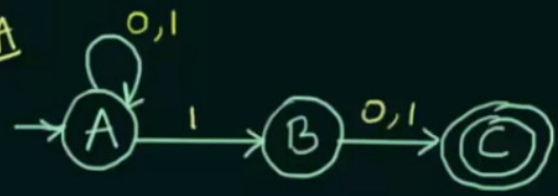
	0	1
→ A	A	AB
AB	AC	ABC
AC	A	AB
ABC		



second last symbol is always 1. Then convert it to its equivalent DFA.

Eg. 1010  
 110  
 1101010

NFA

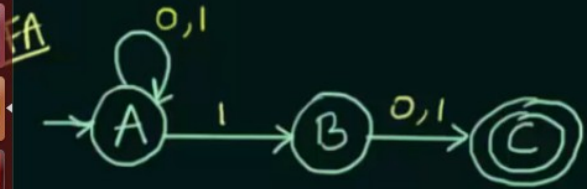


	0	1
→ A	A	A, B
B	C	C
C	φ	φ

DFA

	0	1
→ A	A	AB
AB	AC	ABC
AC	A	AB
ABC	AC	ABC





	0	1
→ A	A	A, B
B	C	C
C	φ	φ

Eg. 1010  
110  
1101010

FA

	0	1
→ A	A	AB
AB	AC	ABC
A	A	AB
AB	AC	ABC

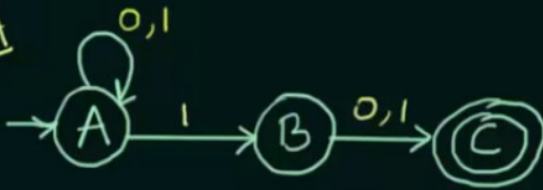




second last symbol is always 1. Then convert it to its equivalent DFA.

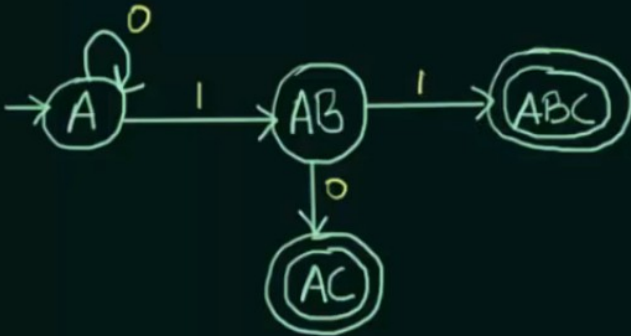
Eg. 1010  
 110  
 1101010

NFA



	0	1
→ A	A	A, B
B	C	C
C	φ	φ

DFA



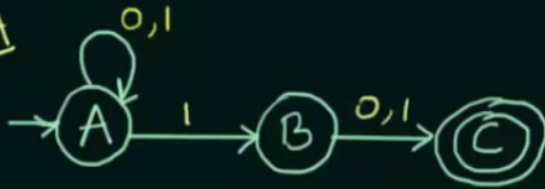
	0	1
→ A	A	AB
AB	AC	ABC
AC	A	AB
ABC	AC	ABC



second last symbol is always 1. Then convert it to its equivalent DFA.

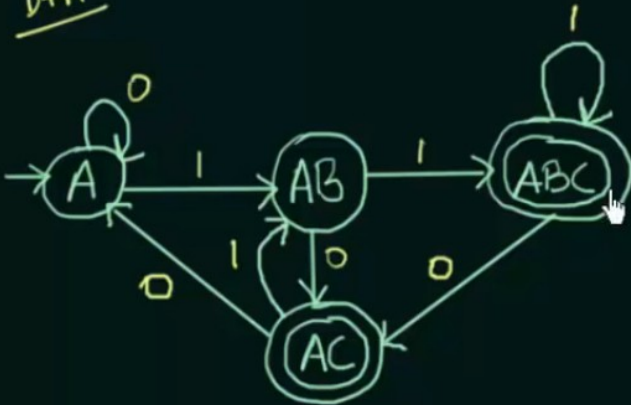
Eg. 1010  
 110  
 1101010

NFA



	0	1
→ A	A	A, B
B	C	C
C	∅	∅

DFA



	0	1
→ A	A	AB
AB	AC	ABC
AC	A	AB
ABC	AC	ABC



• **Questions????**