

NFA-DFA Conversion Example- 1

Conversion of NFA to DFA - Examples (Part 1)

$L = \{ \text{Set of all strings over } (0,1) \text{ that ends with '1'} \}$



Conversion of NFA to DFA - Examples (Part 1)

$L = \{ \text{Set of all strings over } (0,1) \text{ that ends with '1'} \}$

$\Sigma = 0, 1$

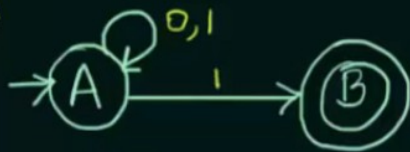


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NFA



	0	1
A	{A}	{A, B}
B	ϕ	ϕ

DFA

	0	1
A	{A}	

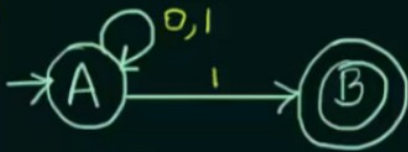


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NFA



	0	1
A	{A}	{A, B}
B	ϕ	ϕ

DFA

	0	1
A	{A}	{AB}

AB - single
state

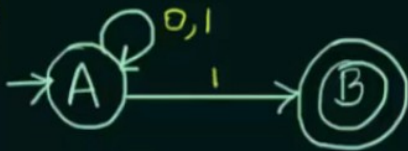


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NFA



	0	1
A	{A}	{A, B}
B	ϕ	ϕ

DFA

	0	1
A	{A}	{AB}
AB	{A}	{AB}

AB - single state

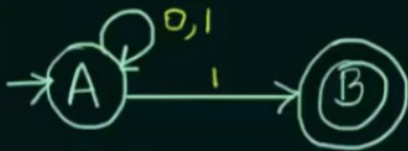


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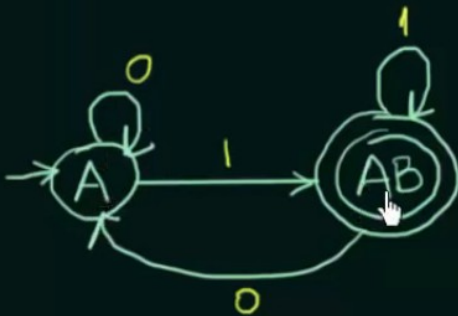
$\Sigma = 0, 1$

NFA



	0	1
A	{A}	{A, B}
B	ϕ	ϕ

DFA



	0	1
A	{A}	{AB}
AB	{A}	{AB}

AB - single
state

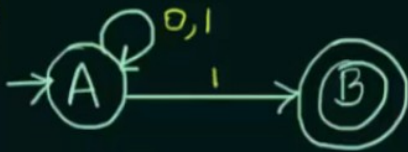


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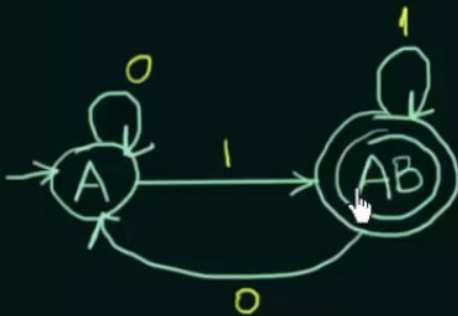
$\Sigma = 0, 1$

NFA



	0	1
A	{A}	{A, B}
B	ϕ	ϕ

DFA



	0	1
A	{A}	{AB}
AB	{A}	{AB}

AB - single
state

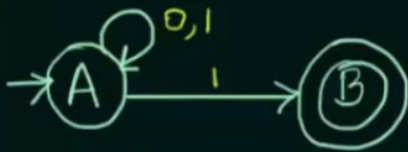


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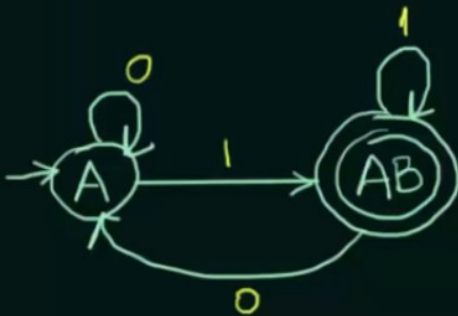
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$\Sigma = 0, 1$

NFA



DFA



	0	1
A	{A}	{A, B}
B	\emptyset	\emptyset

Subset
construction
method

	0	1
A	{A}	{AB}
AB	{A}	{AB}

AB - single
state

• **Questions????**