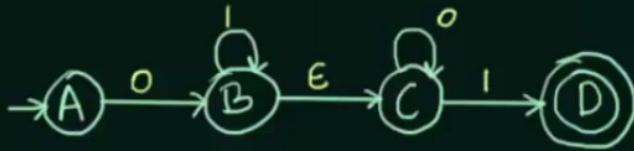


Epsilon NFA

Conversion of ϵ -NFA to NFA -Examples (Part-1)

Convert the following ϵ -NFA to its equivalent NFA



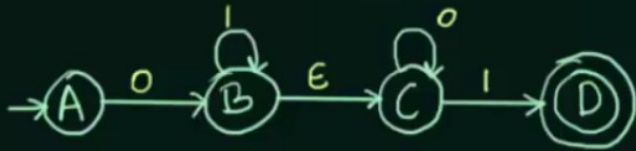
	0	1
→A		
B		
C		
D		

ϵ^+	0	ϵ^+

ϵ^+	1	ϵ^+

Conversion of ϵ -NFA to NFA -Examples (Part-1)

Convert the following ϵ -NFA to its equivalent NFA



NFA

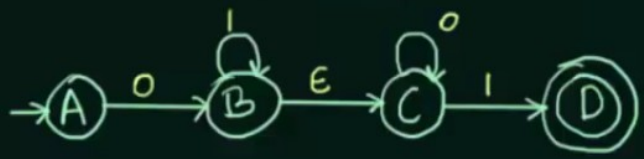
	0	1
→ A	B, C	
B		
C		
D		

	ϵ^+	0	ϵ^+
A	A	B	B C

	ϵ^+	1	ϵ^+
A	A	\emptyset	\emptyset

Conversion of ϵ -NFA to NFA -Examples (Part-1)

Convert the following ϵ -NFA to its equivalent NFA



NFA

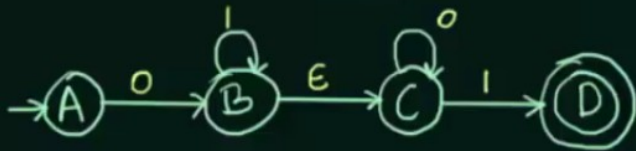
	0	1
→ A	B, C	ϕ
B	C	
C		
D		

	ϵ^+	0	ϵ^+
A	A	B	B C
B	B C	ϕ C	ϕ C

	ϵ^+	1	ϵ^+
A	A	ϕ	ϕ

Conversion of ϵ -NFA to NFA -Examples (Part-1)

Convert the following ϵ -NFA to its equivalent NFA



NFA

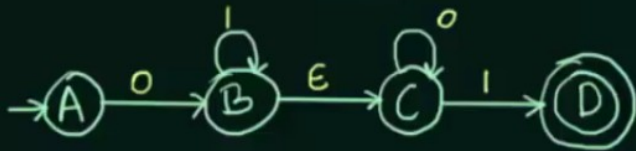
	0	1
→ A	B, C	ϕ
B	C	
C		
D		

	ϵ^+	0	ϵ^+
A	A	B	B C
B	B C	ϕ C	ϕ C

	ϵ^+	1	ϵ^+
A	A	ϕ	ϕ
B	B C	B D	B C D

Conversion of ϵ -NFA to NFA -Examples (Part-1)

Convert the following ϵ -NFA to its equivalent NFA



NFA

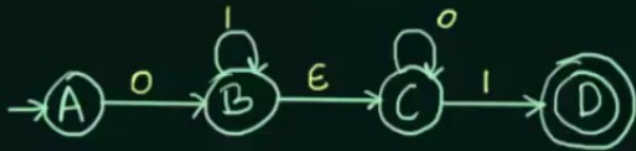
	0	1
→ A	B, C	ϕ
B	C	B, C, D
C		
D		

	ϵ^+	0	ϵ^+
A	A	B	B C
B	B C	ϕ C	ϕ C
C	C	C	C

	ϵ^+	1	ϵ^+
A	A	ϕ	ϕ
B	B C	B D	B C D

Conversion of ϵ -NFA to NFA -Examples (Part-1)

Convert the following ϵ -NFA to its equivalent NFA



NFA

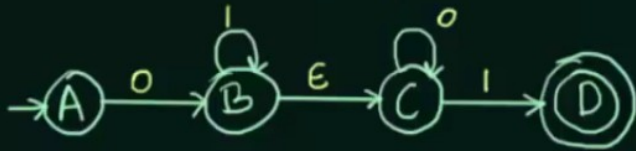
	0	1
→ A	B, C	ϕ
B	C	B, C, D
C	C	
D		

	ϵ^+	0	ϵ^+
A	A	B	B C
B	B C	ϕ C	ϕ C
C	C	C	C

	ϵ^+	1	ϵ^+
A	A	ϕ	ϕ
B	B C	B D	B C D
C	C	D	D

Conversion of ϵ -NFA to NFA -Examples (Part-1)

Convert the following ϵ -NFA to its equivalent NFA



NFA

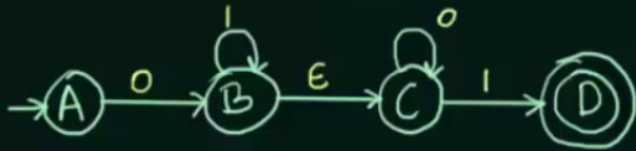
	0	1
→ A	B, C	ϕ
B	C	B, C, D
C	C	D
D		

	ϵ^+	0	ϵ^+
A	A	B	B C
B	B C	ϕ C	ϕ C
C	C	C	C
D	D	ϕ	ϕ

	ϵ^+	1	ϵ^+
A	A	ϕ	ϕ
B	B C	B D	B C D
C	C	D	D

Conversion of ϵ -NFA to NFA -Examples (Part-1)

Convert the following ϵ -NFA to its equivalent NFA



NFA

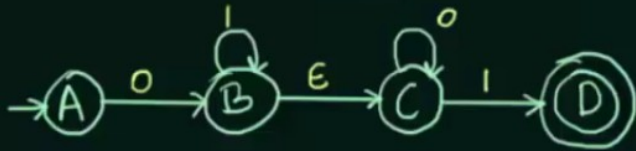
	0	1
→ A	B, C	ϕ
B	C	B, C, D
C	C	D
D	ϕ	ϕ

	ϵ^+	0	ϵ^+
A	A	B	B C
B	B C	ϕ C	ϕ C
C	C	C	C
D	D	ϕ	ϕ

	ϵ^+	1	ϵ^+
A	A	ϕ	ϕ
B	B C	B D	B C D
C	C	D	D
D	D	ϕ	ϕ

Conversion of ϵ -NFA to NFA -Examples (Part-1)

Convert the following ϵ -NFA to its equivalent NFA



NFA

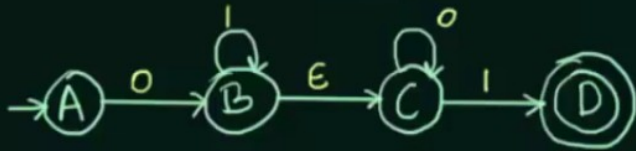
	0	1
→ A	B, C	ϕ
B	C	B, C, D
C	C	D
D	ϕ	ϕ

	ϵ^+	0	ϵ^+
A	A	B	B C
B	B C	ϕ C	ϕ C
C	C	C	C
D	D	ϕ	ϕ

	ϵ^+	1	ϵ^+
A	A	ϕ	ϕ
B	B C	B D	B C D
C	C	D	D
D	D	ϕ	ϕ

Conversion of ϵ -NFA to NFA -Examples (Part-1)

Convert the following ϵ -NFA to its equivalent NFA



NFA

	0	1
→ A	B, C	ϕ
B	C	B, C, D
C	C	D
⊙ D	ϕ	ϕ

	ϵ^+	0	ϵ^+
A	A	B	B C
B	B C	ϕ C	ϕ C
C	C	C	C
D	D	ϕ	ϕ

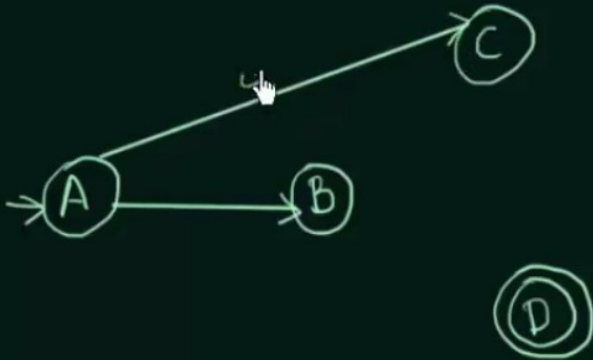
	ϵ^+	1	ϵ^+
A	A	ϕ	ϕ
B	B C	B D	B C D
C	C	D	D
D	D	ϕ	ϕ

NFA

	0	1
$\rightarrow A$	B, C	ϕ
B	C	B, C, D
C	C	D
$\odot D$	ϕ	ϕ

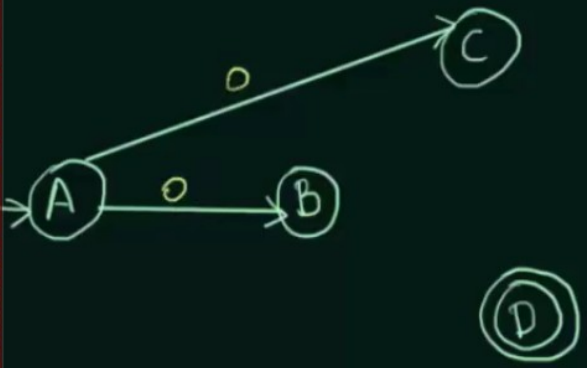
B	B	ϕ	ϕ
C	C	C	C
C	C	C	C
D	D	ϕ	ϕ

B	B	B	B
C	C	D	C
C	C	D	D
D	D	ϕ	ϕ



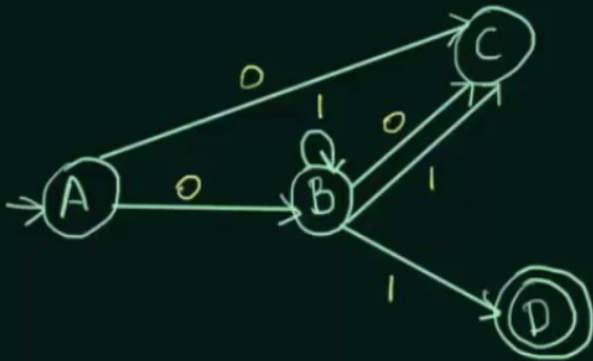
0	1
B, C	ϕ
C	B, C, D
C	D
ϕ	ϕ

B	B	ϕ	ϕ	C	D	C
	C	C	C			D
C	C	C	C	C	C	D
D	D	ϕ	ϕ	D	D	ϕ



NFA

	0	1
→ A	B, C	ϕ
B	C	B, C, D
C	C	D
⊙ D	ϕ	ϕ



B	B	ϕ	ϕ
C	C	C	C
C	C	C	C
D	D	ϕ	ϕ

B	B	B	B
C	C	D	C
C	C	D	D
D	D	ϕ	ϕ

NFA

	0	1
→ A	B, C	ϕ
B	C	B, C, D
C	C	D
⊙ D	ϕ	ϕ



B	B	ϕ	ϕ
C	C	C	C
D	D	ϕ	ϕ

B	B	B	B
C	C	D	C
C	C	D	D
D	D	ϕ	ϕ

NFA

	0	1
→A	B, C	ϕ
B	C	B, C, D
C	C	D
ⓓ	ϕ	ϕ



NFA

B	B	ϕ	ϕ
C	C	C	C
D	D	ϕ	ϕ

B	B	B	B
C	C	D	C
D	D	ϕ	ϕ

• **Questions????**