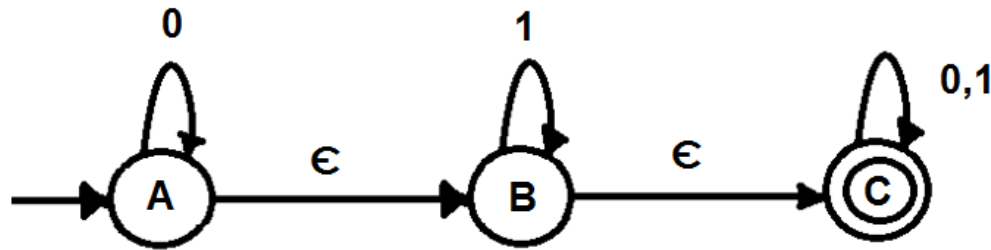




EPSILON NFA

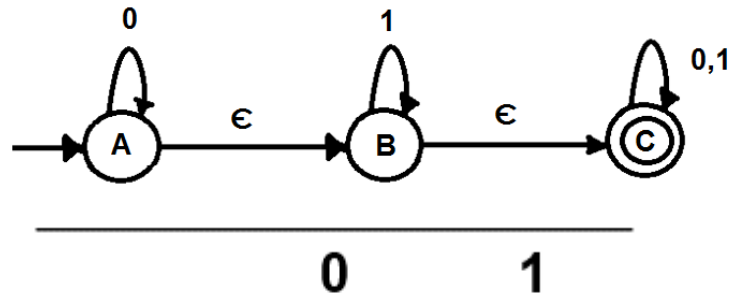
NFA'S WITH ϵ -TRANSITIONS

- We can allow state-to-state transitions on ϵ input.
- These transitions are done spontaneously, without looking at the input string.



CONVERSION OF ϵ -NFA TO NFA

- ϵ -Closure(ϵ^*) - All the states that can be reached from a particular state only by seeing the ϵ symbol



	0	1
$\xrightarrow{*} A$	A,B,C	B,C
$* B$	C	B,C
$* C$	C	C

	ϵ^*	0	ϵ^*
A	A	A	A,B,C
	B	Φ	
	C	C	C

	ϵ^*	1	ϵ^*
A	A	Φ	
	B	B	B,C
	C	C	C

	ϵ^*	0	ϵ^*
B	B	Φ	
	C	C	C

	ϵ^*	1	ϵ^*
B	B	B	B,C
	C	C	C

	ϵ^*	0	ϵ^*
C	C	C	C

	ϵ^*	1	ϵ^*
C	C	C	C

EXAMPLE

- Convert the following ϵ -NFA into NFA
- 1.
- 2.

