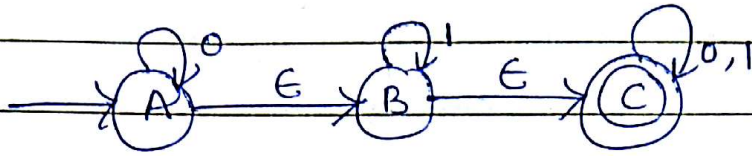
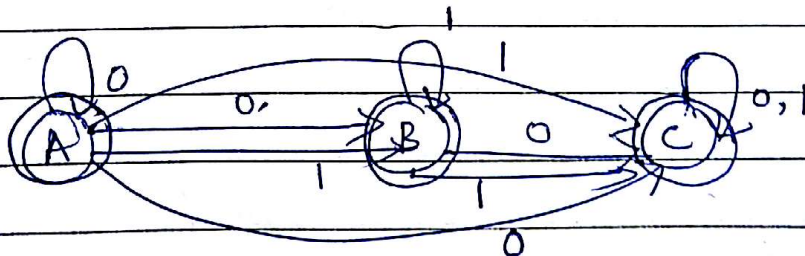
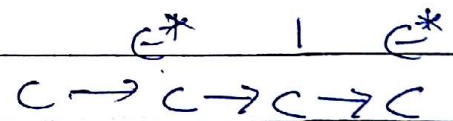
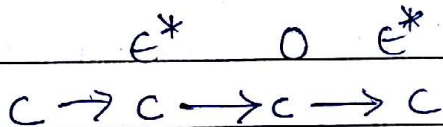
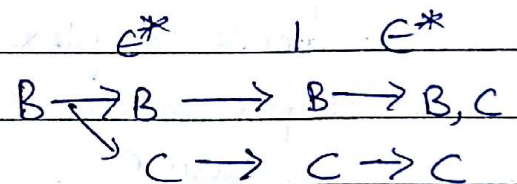
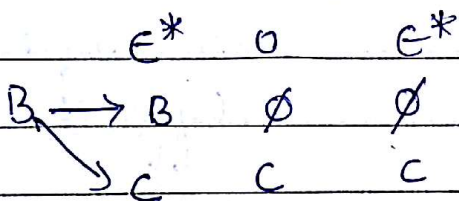
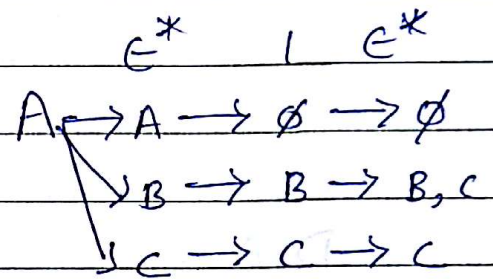
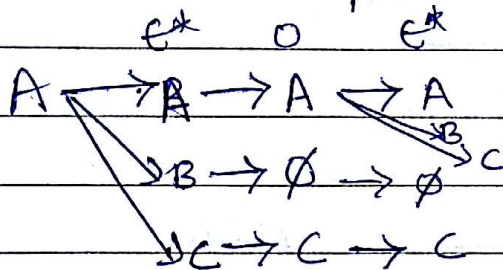


ENFA to NFA

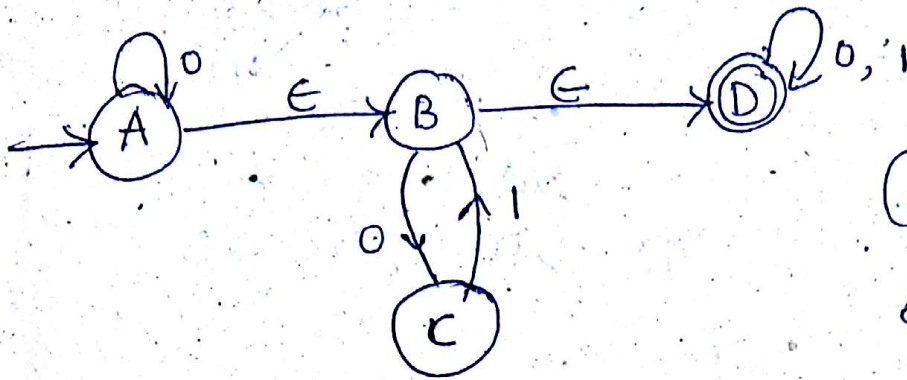


	0	1
→ A	{A, B, C}	{B, C}
* B	C	{B, C}
* C	C	C

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



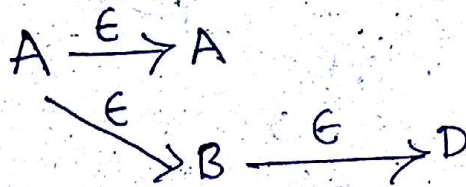
E - NFA



$$(Q, \Sigma, \delta, q_0, F)$$

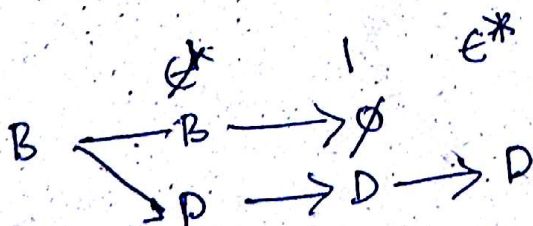
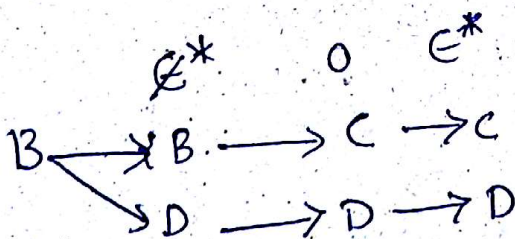
$$\delta: Q \times \Sigma \cup \{\epsilon\} \rightarrow 2^Q$$

$$\epsilon\text{-closure}(A) = \{A, B, D\}$$

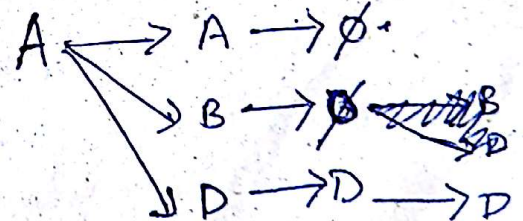
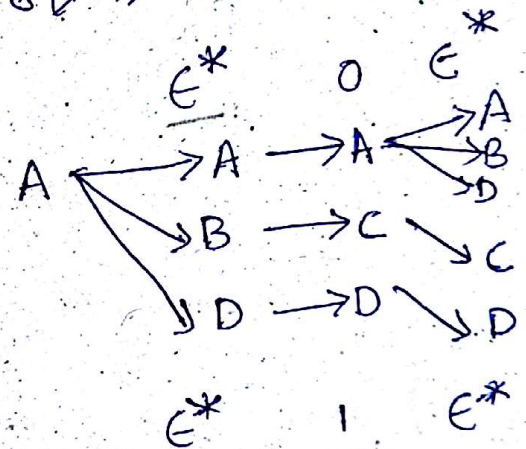


E-NFA convert into NFA

	0	1
* → A	{A, B, C, D}	{D}
* B	{C, D}	{D}
* C	∅	{B, D}
* D	{D}	{D}



$$\delta(A, 0) \neq A$$



$$\delta'(A, 0) = \epsilon\text{-closure}$$

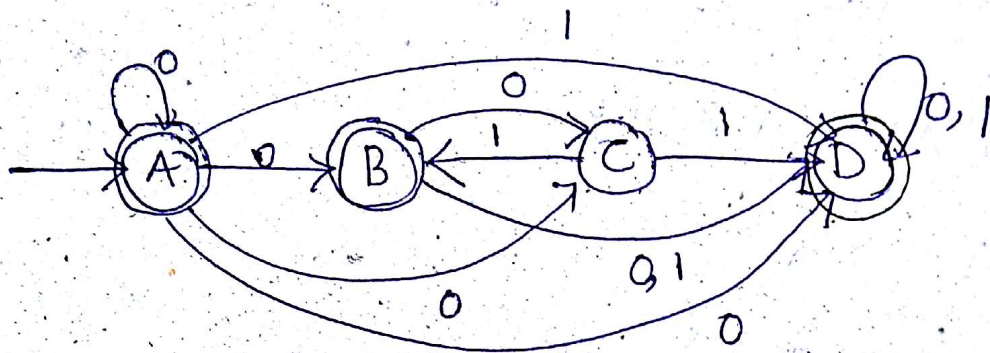
$$[\delta(\epsilon\text{-closure}(A), 0)]$$

$\epsilon^* \quad 0 \quad \epsilon^*$
 $C \rightarrow C \rightarrow \emptyset$

$\epsilon^* \quad 1 \quad \epsilon^*$
 $C \rightarrow C \rightarrow B \rightarrow B \rightarrow D$

$\epsilon^* \quad 0 \quad \epsilon^*$
 $D \rightarrow D \rightarrow D \rightarrow D$

$\epsilon^* \quad 1 \quad \epsilon^*$
 $D \rightarrow D \rightarrow D \rightarrow D$



A, B, D are final states