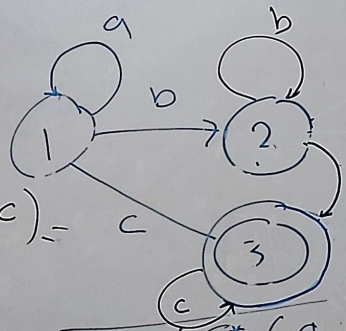
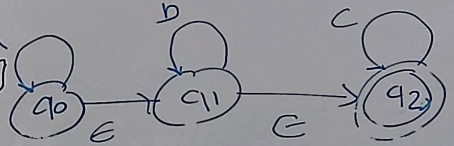


$\epsilon^*(\{q_2\}, a) = \phi$

$\epsilon^*(\{q_2\}, b) = \phi$

$\epsilon^*(\{q_2\}, c) = \{q_2\}$



$\epsilon^*((q_1, q_2), c) = c$

$= \epsilon^* \{q_2\}$

$= \{q_2\}$

$\epsilon^*((q_1, q_2), a)$

$= \epsilon^*[\phi] = \phi$

$\epsilon^*((q_1, q_2), b)$

$= \epsilon^* \{q_1\}$

$= \{q_1, q_2\} \rightarrow (2)$

NFA

(1) $q_0 \rightarrow \epsilon^*(q_0) = \{q_1, q_2, c\} \rightarrow (1)$

(1) $\epsilon^*((q_0, q_1, q_2), a)$

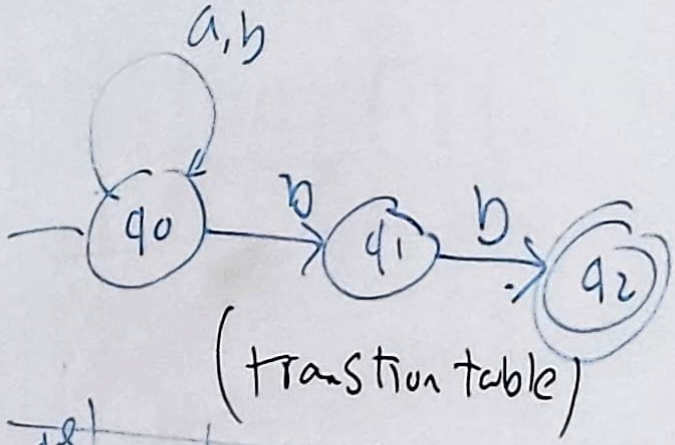
$\epsilon^* \rightarrow \{q_0\} = \{q_0, q_1, q_2\}^*$

(2) $\epsilon^*(q_0, q_1, q_2), b) \{q_1\} = \{q_1, q_2\}$

(3) $\epsilon((q_0, q_1, q_2), c) = \{q_2\} = \{q_2\}$ (2)

(3) <

NFA → DFA



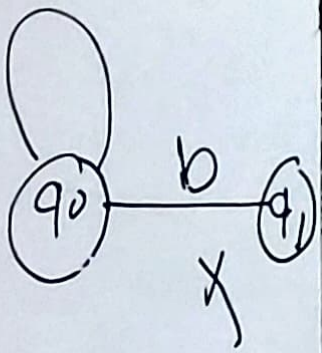
(transition table)

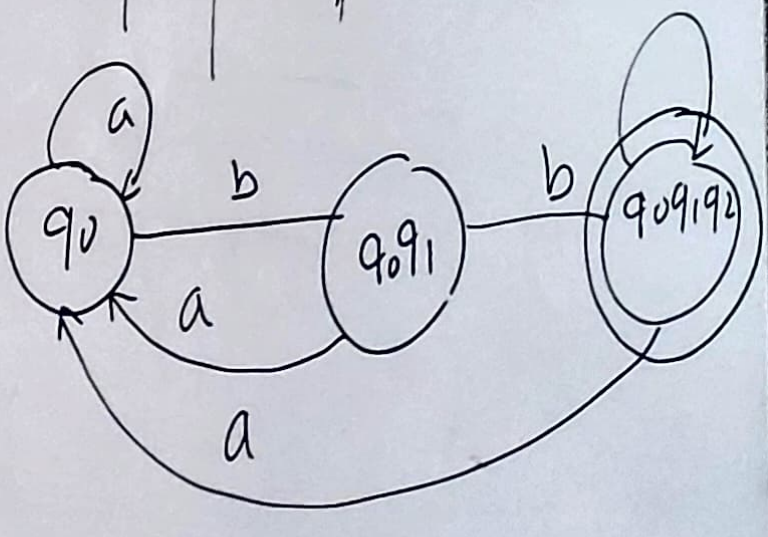
State	a	b
q_0	q_0	$\{q_0, q_1\}$
q_1	ϕ	q_2
q_2	ϕ	ϕ

NFA

DFA

S	a	b
→ q_0	q_0	q_0q_1
q_0q_1	q_0	$q_0q_1q_2$
* $q_0q_1q_2$	q_0	$q_0q_1q_2$





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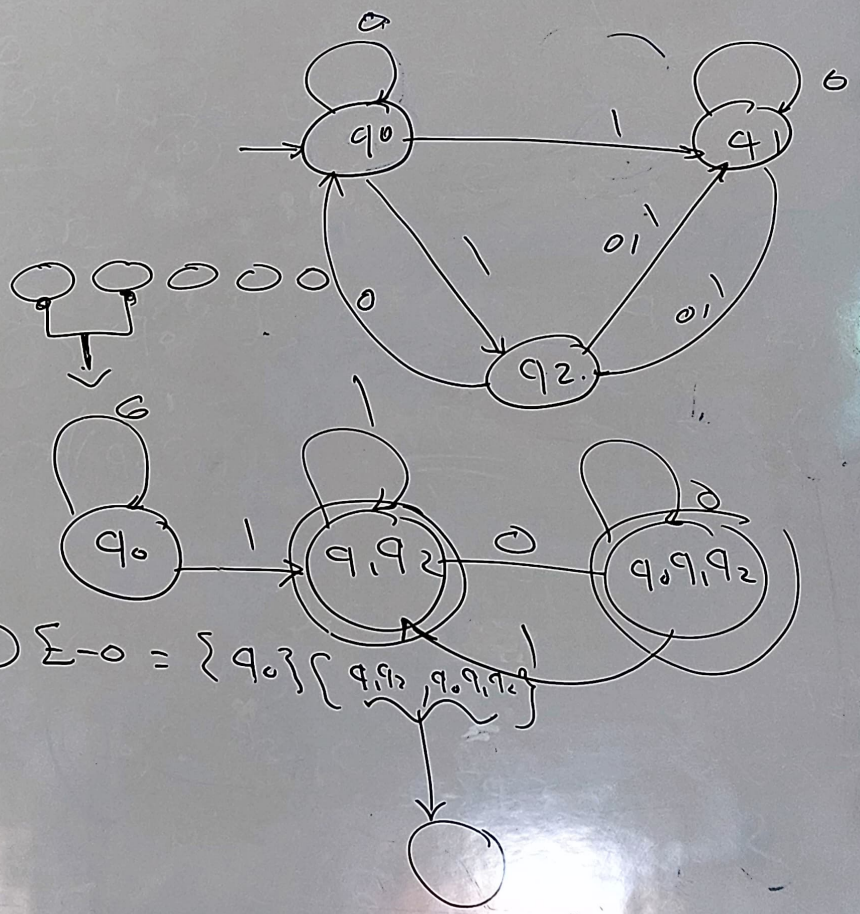
① transition table

NFA

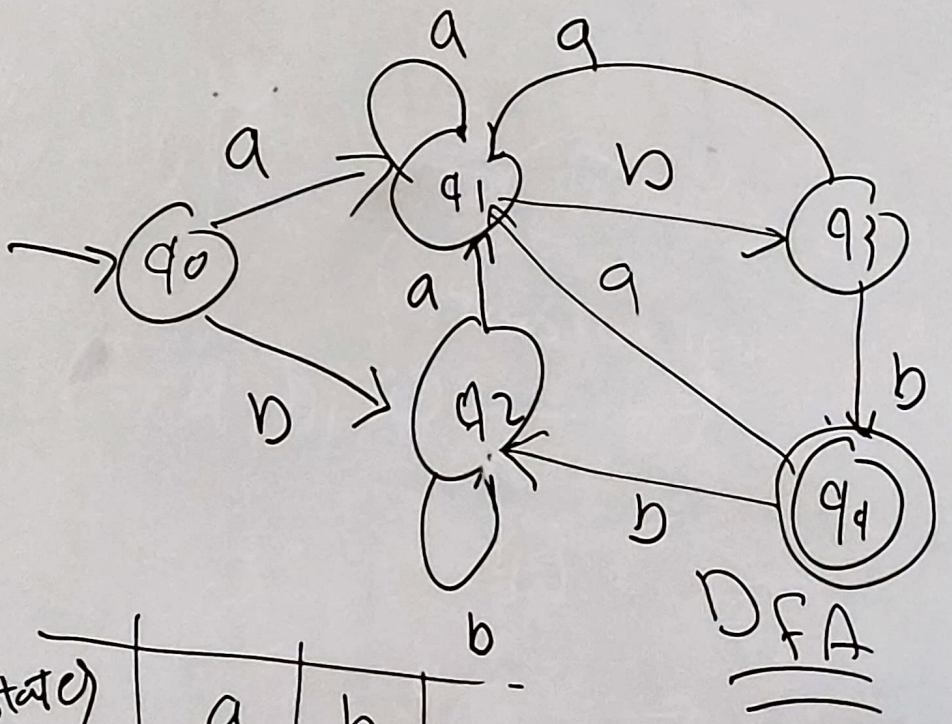
δ	0	1
q_0	q_0	q_1, q_2
q_1	q_1, q_2	q_2
q_2	$q_0 q_1$	q_1

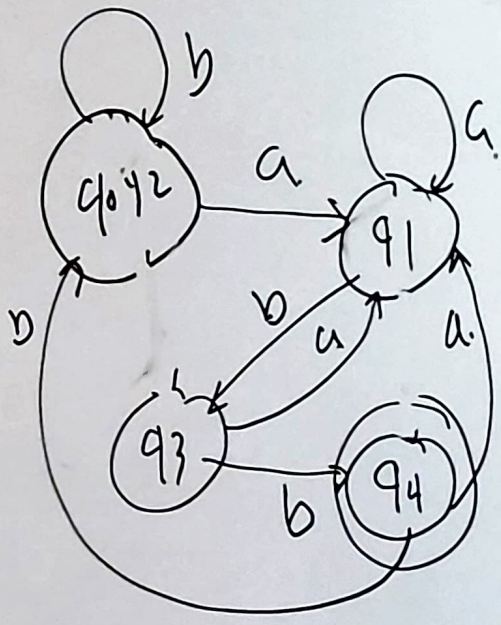
DFA

	state	0	1
	q_0	q_0	$q_1 q_2$
*	$q_1 q_2$	$q_0 q_1 q_2$	$q_1 q_2$
*←	$q_0 q_1 q_2$	$q_0 q_1 q_2$	$q_1 q_2$



① $\Sigma - 0 = \{q_0\}\{q_1 q_2, q_0 q_1 q_2\}$





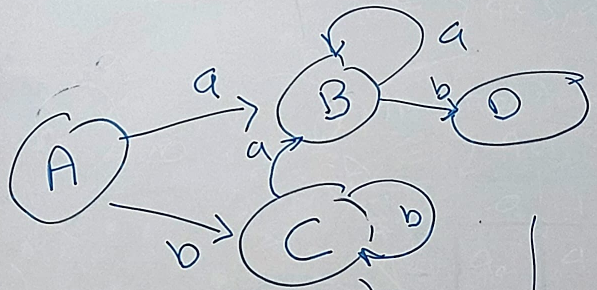
state	a	b
q_0	q_1	q_2
q_1	q_1	q_3
q_2	q_1	q_2
q_3	q_1	q_4
* q_4	q_1	q_2

① 0-E = $\{q_0, q_1, q_2, q_3\}\{q_4\}$

② 1-E = $\{q_0, q_1, q_2\}\{q_3\}\{q_4\}$

③ 2-E = $\{q_0, q_2\}\{q_1\}\{q_3\}\{q_4\}$

④ 3-E = $\{q_0, q_2\}\{q_1\}\{q_3\}\{q_4\}$



$\epsilon^*(0) = \{0, 1, 2, 4, 7\}$ A

$\epsilon^*(A, a) = \epsilon^*\{3, 8\}$

$= \{3, 6, 7, 1, 2, 4, 8\} \rightarrow (B)$

$\epsilon^*(A, b) = \epsilon^*(5)$

$= \{5, 6, 7, 1, 2, 4\} \rightarrow C$

$\epsilon^*(B, a) = \epsilon^*\{8, 3\} = B$

$\epsilon^*(B, b) = \epsilon^*\{5, 9\}$

$= \{5, 6, 7, 1, 2, 4, 9\} \rightarrow (D)$

$\epsilon^*(C, a) =$

$\{8, 3\} = B$

$\epsilon^*(C, b) =$

$= \epsilon^*\{5\} = C$

$\epsilon^*(D, a) = \epsilon^*\{7, 8\} = B$

$\epsilon^*(D, b) = \epsilon^*\{5, 10\} \longrightarrow E$

$= \{5, 6, 7, 1, 2, 4, 10\}$

$\epsilon^*-(E, a) = \epsilon^*\{3, 8\} = B$

$\epsilon^*-(E, b) = \{5\} \longrightarrow C$

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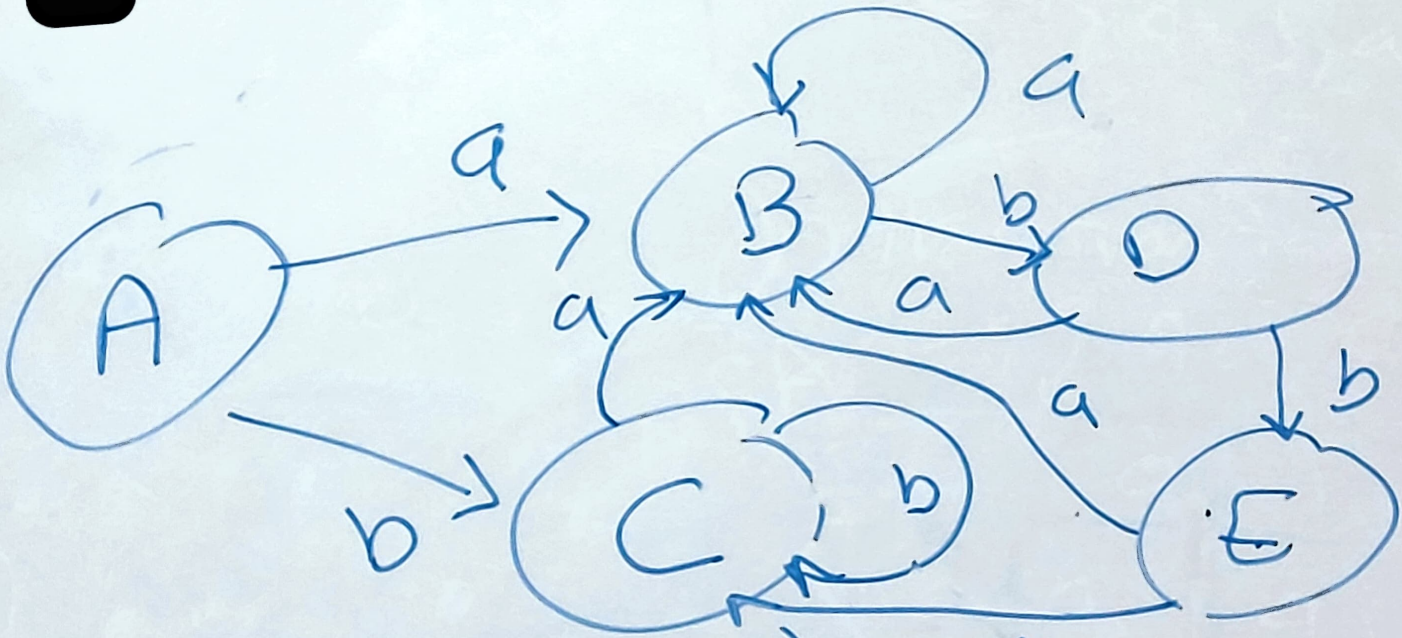

$\epsilon^*-(C,a)=$

ϵ^*