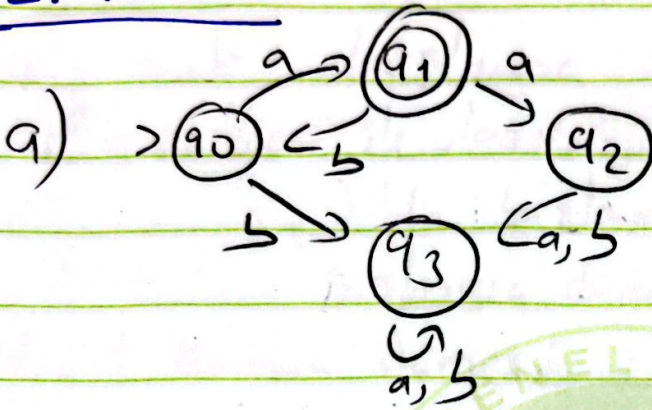
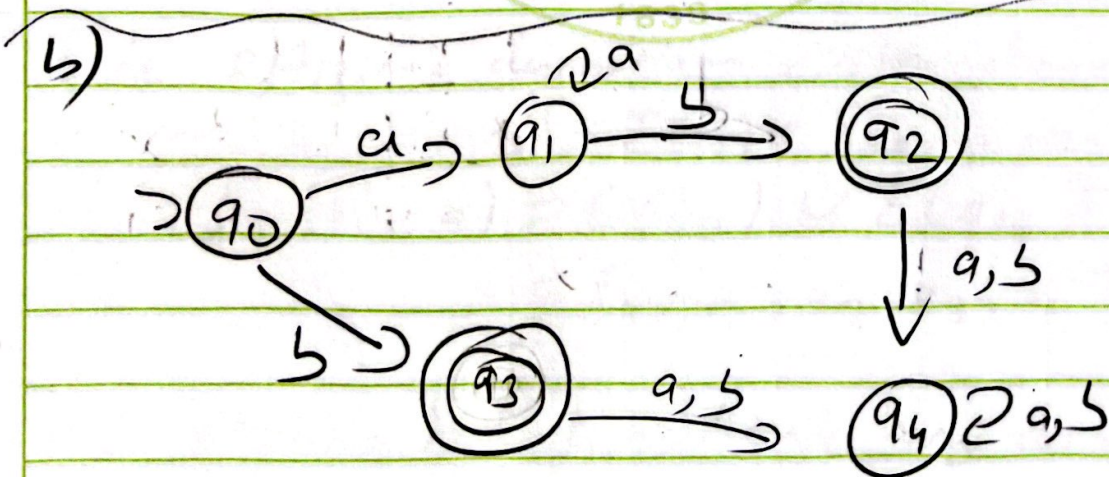
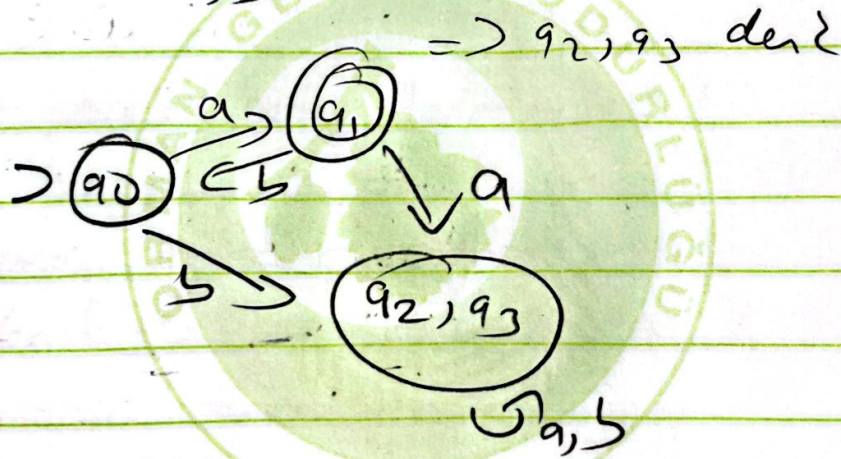


2.5.3

2.1.2

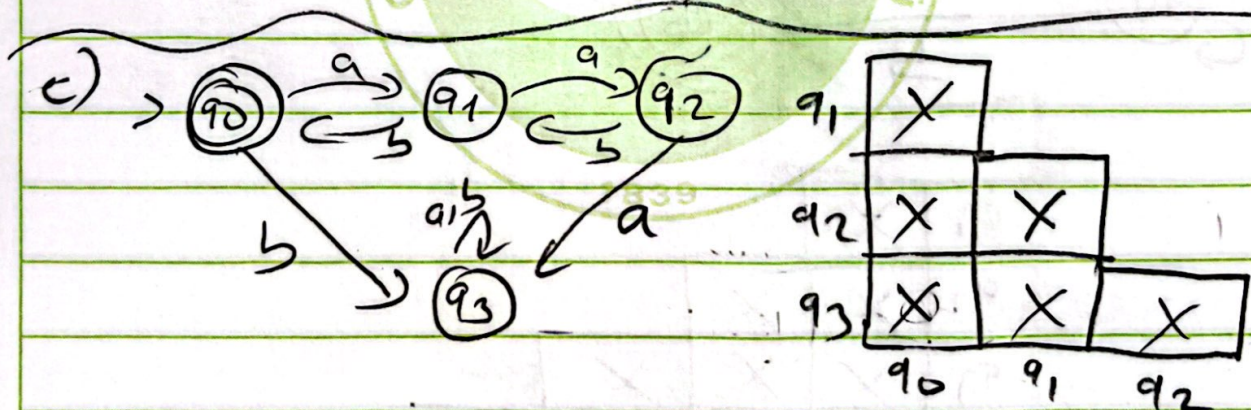
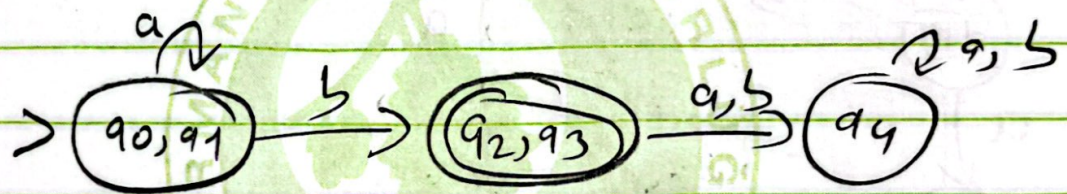


|       |       |       |       |
|-------|-------|-------|-------|
| $q_1$ | X     |       |       |
| $q_2$ | X     | X     |       |
| $q_3$ | X     | X     |       |
|       | $q_0$ | $q_1$ | $q_2$ |



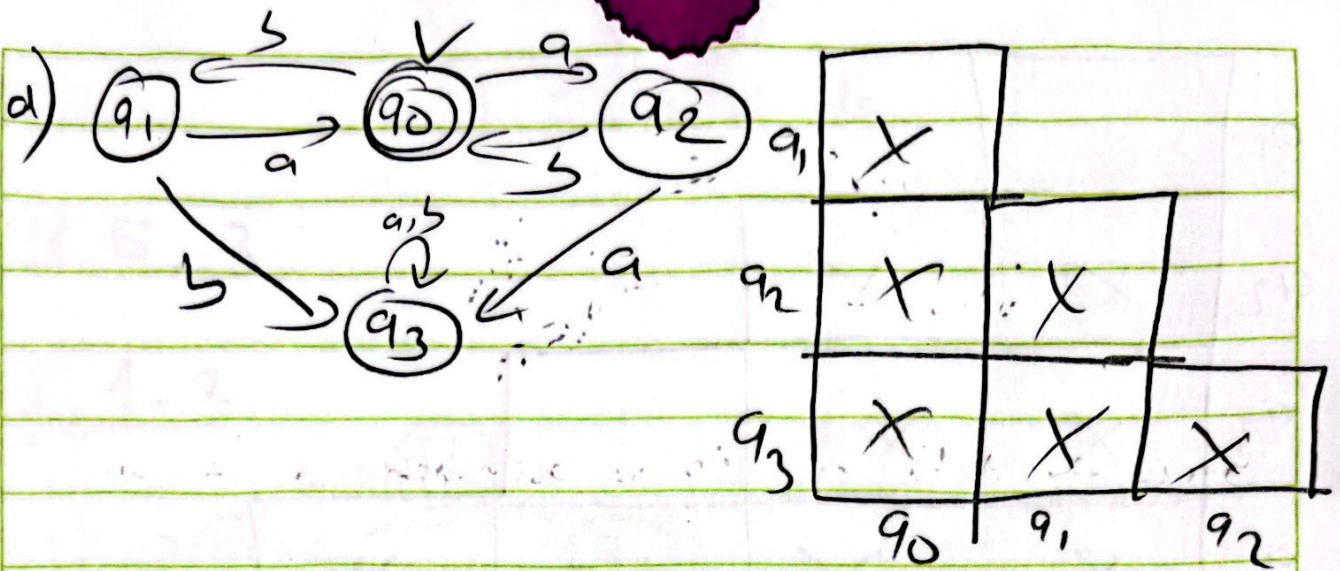


|       |       |       |       |       |
|-------|-------|-------|-------|-------|
| $a_1$ | X     |       |       |       |
| $a_2$ | X     | X     |       |       |
| $a_3$ | X     | X     |       |       |
| $a_4$ | X     | X     | X     | X     |
|       | $a_0$ | $a_1$ | $a_2$ | $a_3$ |

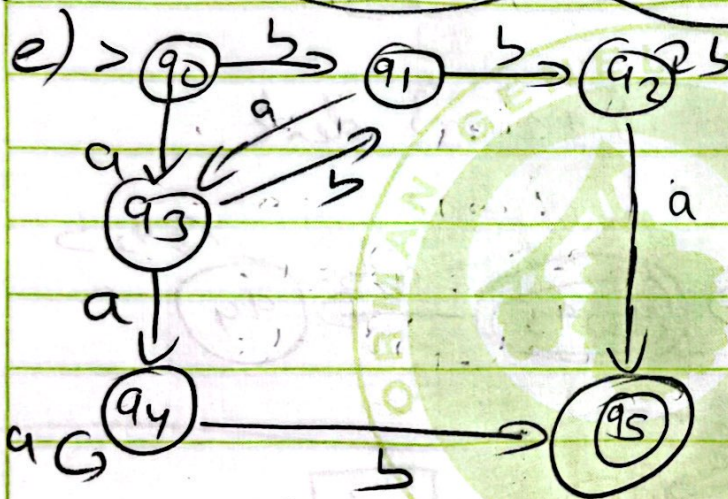
 $\{90, 91\}$  der  $\{92, 93\}$  der

Taken Zende sa de





En sade hâl

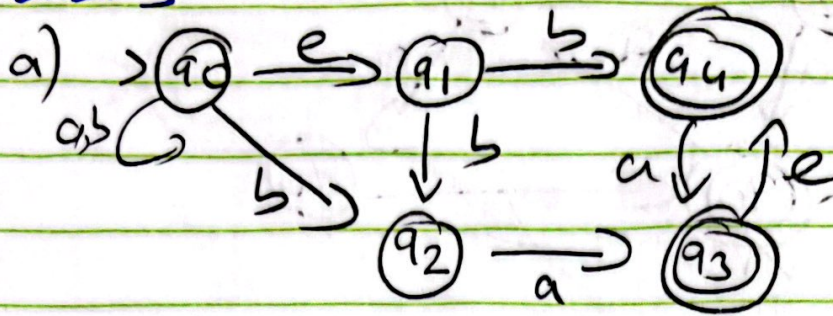


|       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| $q_1$ | X     |       |       |       |       |
| $q_2$ | X     | X     |       |       |       |
| $q_3$ | X     | X     | X     |       |       |
| $q_4$ | X     | X     | X     | X     |       |
| $q_5$ | X     | X     | X     | X     | X     |
|       | $q_0$ | $q_1$ | $q_2$ | $q_3$ | $q_4$ |

En sade hâl



## 2.2.9



Önce bu NFA'ya DFA'ya dönüştürme işlemi

$$q_A = \{q_0, q_1\} / q_B = \varepsilon(q_0) \cup \varepsilon(q_2) \cup \varepsilon(q_4) \\ = \{q_0, q_1, q_2, q_4\}$$

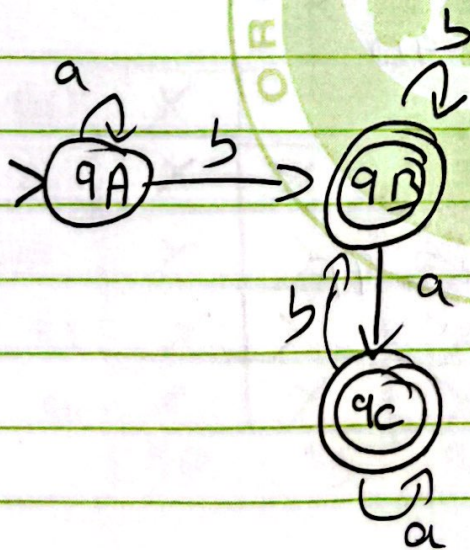
$$q_C = \varepsilon(q_0) \cup \varepsilon(q_3) \\ = \{q_0, q_1, q_3, q_4\}$$

$$\delta'(q_B, a) = q_C$$

$$\delta'(q_B, b) = q_B$$

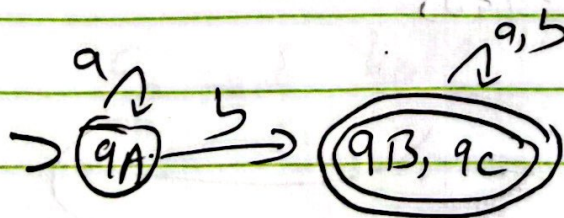
$$\delta'(q_C, a) = q_C$$

$$\delta'(q_C, b) = q_B$$



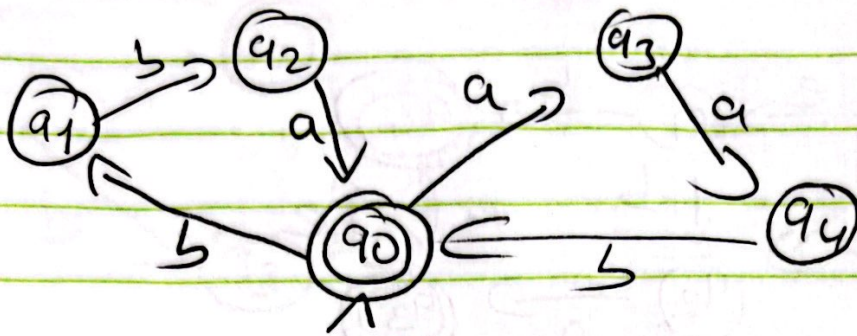
|    |    |    |
|----|----|----|
| qB | X  |    |
| qC | X  |    |
|    | qA | qB |

$\Rightarrow q_B, q_C$  denetir





5)



But since minimize etmek için DFA abstrakte-  
ceğiz.

$$q_A = \{q_0\} / q_B = \{q_3\} / q_C = \{q_1\} / q_D = \{q_4\}$$

$$q_E = \emptyset \quad q_F = \{q_2\}$$

$$S' = \varepsilon(q_0) = \{q_0\} = q_A$$

$$\delta'(S', a) = \varepsilon(q_3) = \{q_3\} = q_B$$

$$\delta'(S', b) = \varepsilon(q_1) = \{q_1\} = q_C$$

$$\delta'(q_B, a) = \varepsilon(q_4) = \{q_4\} = q_D$$

$$\delta'(q_B, b) = \emptyset = q_E$$

$$\delta'(q_C, a) = \emptyset$$

$$\delta'(q_C, b) = \varepsilon(q_2) = \{q_2\} = q_F$$

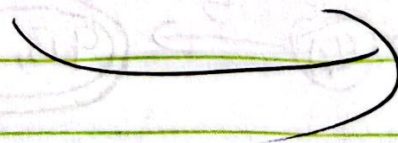
$$\delta'(q_D, a) = \emptyset$$

$$\delta'(q_D, b) = \varepsilon(q_0) = \{q_0\}$$

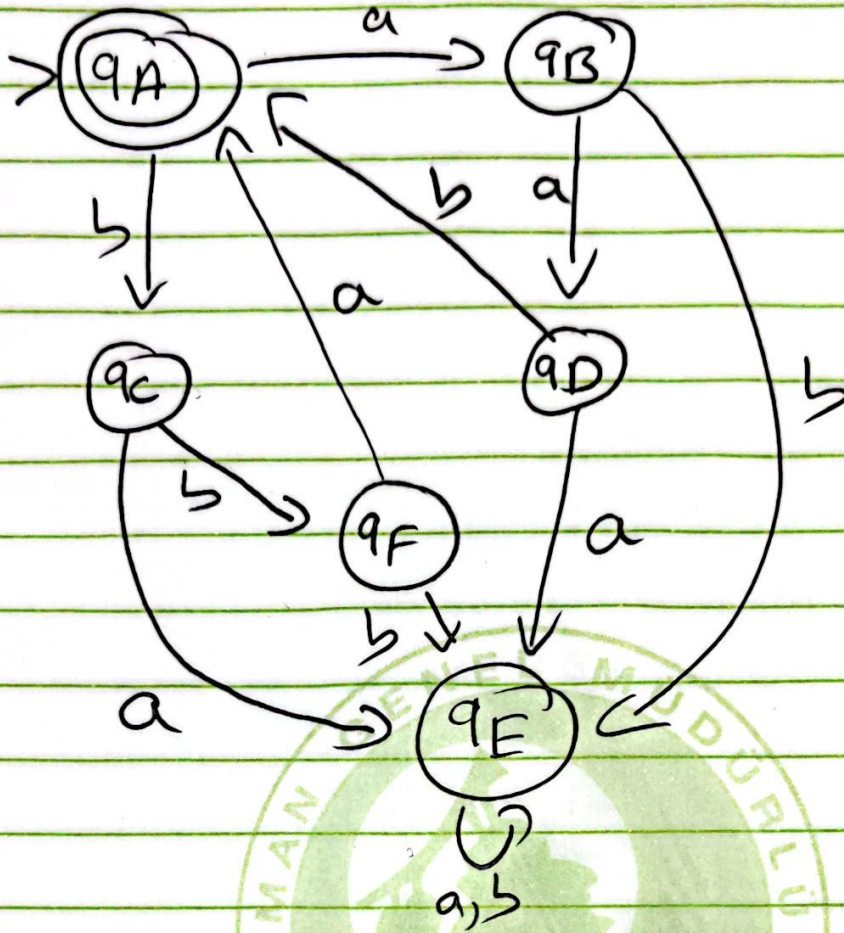
$$\delta'(q_E, a) = \delta'(q_E, b) = \emptyset$$

$$\delta'(q_F, a) = \varepsilon(q_0) = \{q_0\}$$

$$\delta'(q_F, b) = \emptyset$$







| qB | X  |    |    |    |    |
|----|----|----|----|----|----|
| qC | X  | X  |    |    |    |
| qD | X  | X  | X  |    |    |
| qE | X  | X  | X  | X  |    |
| qF | X  | X  | X  | X  | X  |
|    | qA | qB | qC | qD | qE |

En sade hali