

Ejercicio 1:

Valery Carvajal O. 2022314299

Ejercicio 1.

Método Dtran

Operaciones:

- ϵ -cerradura($\{q_0\}$) = $\{q_0\}$
- $Dtran[A, 1] = \epsilon$ -cerradura($mover(\{q_0\}, 1)$) = $\{q_3, q_0\}$
 $Dtran[A, 0] = \epsilon$ -cerradura($mover(\{q_0\}, 0)$) = $\{q_0, q_1, q_2\}$
- $Dtran[B, 1] = \epsilon$ -cerradura($mover(\{q_3, q_0\}, 1)$) = $\{q_0, q_3\}$
 $Dtran[B, 0] = \epsilon$ -cerradura($mover(\{q_3, q_0\}, 0)$) = $\{q_0, q_3, q_2\}$
no hay trans.
- $Dtran[C, 1] = \epsilon$ -cerradura($mover(\{q_0, q_1, q_2\}, 1)$) = $\{q_0, q_1, q_3, q_2, q_4\}$
 $Dtran[C, 0] = \epsilon$ -cerradura($mover(\{q_0, q_1, q_2\}, 0)$) = $\{q_0, q_1, q_2\}$
no hay trans.
- $Dtran[D, 1] = \epsilon$ -cerradura($mover(\{q_0, q_2, q_3\}, 1)$) = $\{q_0, q_3, q_2, q_1, q_4\}$
 $Dtran[D, 0] = \epsilon$ -cerradura($mover(\{q_0, q_2, q_3\}, 0)$) = $\{q_0, q_1, q_2\}$
- $Dtran[E, 1] = \epsilon$ -cerradura($mover(\{q_0, q_1, q_2, q_3, q_4\}, 1)$) = $\{q_0, q_1, q_2, q_3, q_4\}$
 $Dtran[E, 0] = \epsilon$ -cerradura($mover(\{q_0, q_1, q_2, q_3, q_4\}, 0)$) = $\{q_0, q_1, q_2, q_3, q_4\}$
no hay trans.

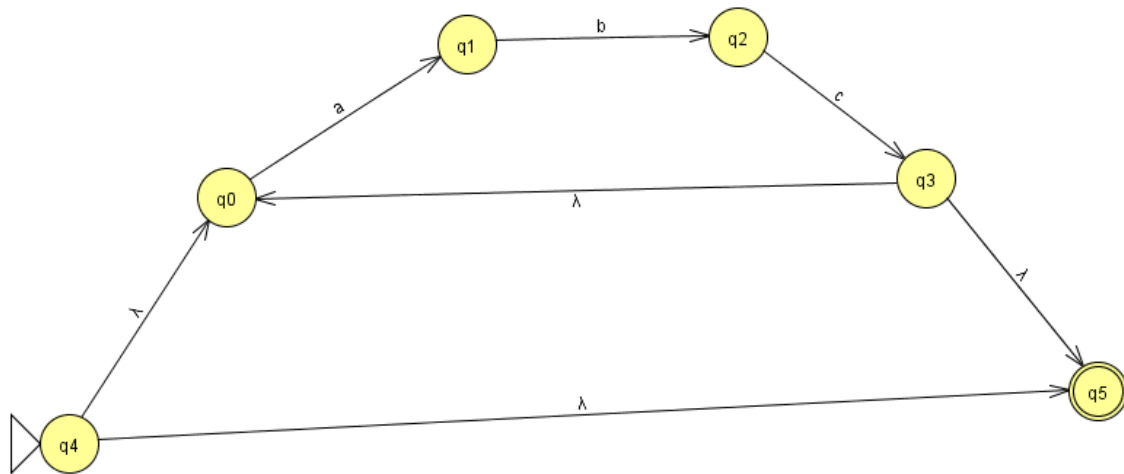
TABLA: Estado del AFD

| | Estado AFN | 1 | 0 |
|---|-------------------------------|---|---|
| A | $\{q_0\}$ | B | C |
| B | $\{q_0, q_3\}$ | B | D |
| C | $\{q_0, q_1, q_2\}$ | E | C |
| D | $\{q_0, q_2, q_3\}$ | E | C |
| E | $\{q_0, q_1, q_2, q_3, q_4\}$ | E | E |

Nota: los puntos de colores solo se utilizaron para llevar un orden al hacer el ejercicio y remarcar que eran iguales.

Ejercicio 2:

1.



2.

