

1)

a)

$Q = \{q_1, q_2\}$

$\Sigma = \{a, b\}$

$\Gamma = \{a, b, \underline{b}\}$

$s = q_1$

$F = \{q_2\}$

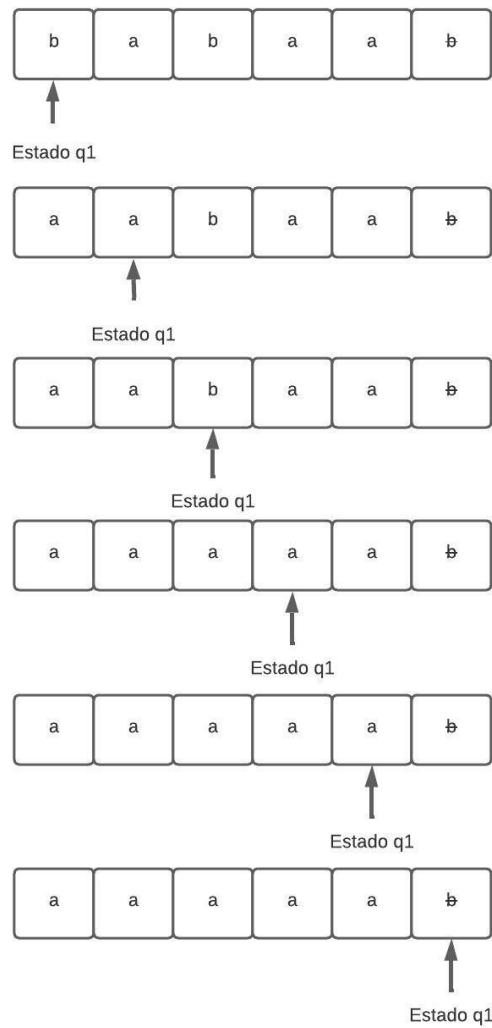
$\delta$  dado por:

$\delta(q_1, a) = (q_1, a, R)$

$\delta(q_1, b) = (q_1, a, R)$

$\delta(q_1, \underline{b}) = (q_2, \underline{b}, L)$

Cadena: **babaab**



b)

$Q = \{q_0, q_1\}$

$\Sigma = \{0, 1\}$

$\Gamma = \{0, 1, B\}$

$s = q_0$

$F = \{q_1\}$

$\delta$  dado por:

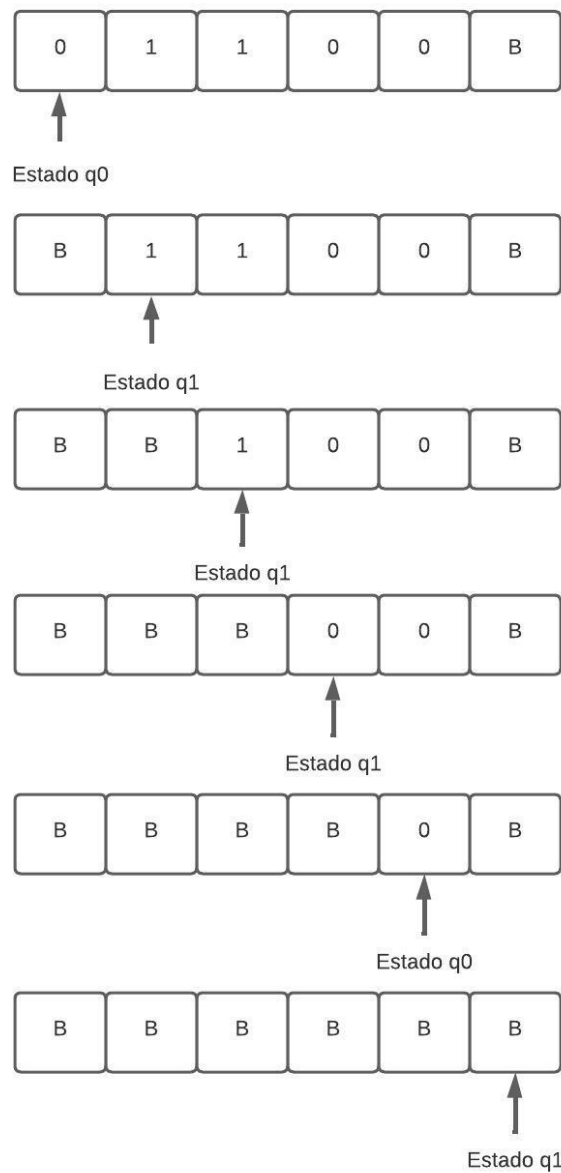
$\delta(q_0, 0) = (q_1, B, R)$

$\delta(q_0, 1) = (q_0, B, R)$

$\delta(q_1, 0) = (q_0, B, R)$

$\delta(q_1, 1) = (q_1, B, R)$

Cadena: **01100**



2)

a)

$Q = \{q_0, q_1, q_2, q_3\}$

$\Sigma = \{x, y\}$

$\Gamma = \{x, y, \underline{b}\}$

$s = q_0$

$F = \{q_1, q_2, q_3\}$

$\delta$  dado por:

$\delta(q_0, x) = (q_1, x, R)$

$\delta(q_1, x) = (q_2, x, R)$

$\delta(q_1, y) = (q_1, y, R)$

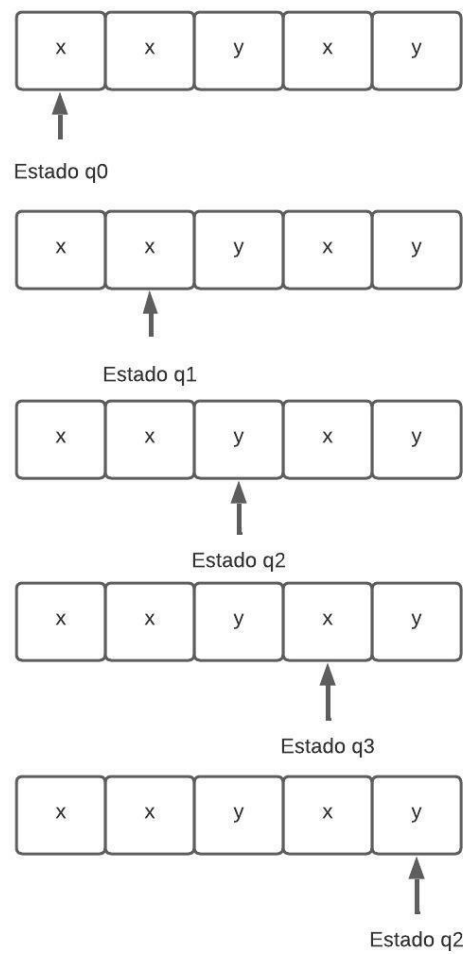
$\delta(q_2, x) = (q_2, x, R)$

$\delta(q_2, y) = (q_3, y, R)$

$\delta(q_3, x) = (q_2, x, R)$

$\delta(q_3, y) = (q_3, y, R)$

Cadena: **xxxyxy**



b)

$Q = \{q_0, q_1, q_2, q_3\}$

$\Sigma = \{a, c\}$

$\Gamma = \{a, c, \underline{b}\}$

$s = q_0$

$F = \{q_2, q_3\}$

$\delta$  dado por:

$\delta(q_0, c) = (q_2, a, R)$

$\delta(q_0, a) = (q_1, a, R)$

$\delta(q_1, c) = (q_3, c, R)$

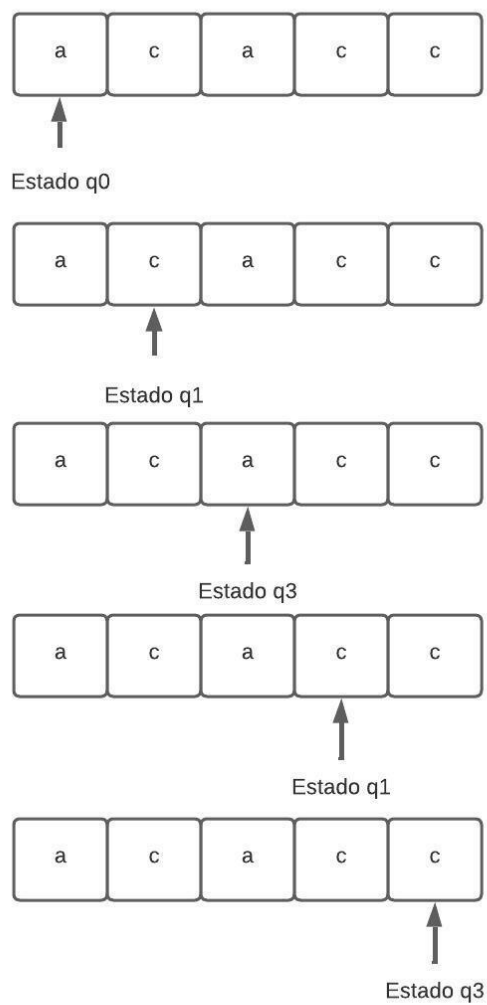
$\delta(q_2, a) = (q_1, a, R)$

$\delta(q_2, c) = (q_2, c, R)$

$\delta(q_3, a) = (q_1, a, R)$

$\delta(q_3, c) = (q_2, c, R)$

Cadena: **acacc**



c)

$Q = \{q_0, q_1, q_2, q_3, q_4\}$

$\Sigma = \{a, b\}$

$\Gamma = \{a, b, \underline{b}\}$

$s = q_0$

$F = \{q_3, q_4\}$

$\delta$  dado por:

$\delta(q_0, a): (q_4, a, R)$

$\delta(q_0, b): (q_1, b, R)$

$\delta(q_1, a): (q_4, a, R)$

$\delta(q_1, b): (q_2, b, R)$

$\delta(q_2, a): (q_3, a, R)$

$\delta(q_2, b): (q_2, b, R)$

$\delta(q_3, a): (q_4, a, R)$

$\delta(q_3, b): (q_2, b, R)$

$\delta(q_4, a): (q_4, a, R)$

$\delta(q_4, b): (q_3, b, R)$

Cadena: **bbaaa**

