

Máquina de Turing

*Ejercicio 1:

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

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

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

$$F = \{q_2\}$$

$$s = \{q_1\}$$

$$\delta(q_1, 0) = (q_1, 1, R)$$

$$\delta(q_1, 1) = (q_1, 0, R)$$

$$\delta(q_1, _) = (q_2, _, *)$$

100110

q_1 000110 \vdash 0 q_1 10110 \vdash 01 q_1 1110 \vdash 011 q_1 010 \vdash 0110 q_1 00 \vdash 01100 q_1 1 \vdash 011001 q_2 _

*Ejercicio 2:

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

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

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

$$F = \{q_3\}$$

$$s = \{q_0\}$$

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

$$\delta(q_0, 1) = (q_1, 1, R)$$

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

$$\delta(q_1, 1) = (q_2, 1, R)$$

$$\delta(q_2, 0) = (q_2, 0, R)$$

$$\delta(q_2, 1) = (q_1, 1, R)$$

$$\delta(q_0, _) = (q_3, _, *)$$

$$\delta(q_1, _) = (q_3, 0, *)$$

$$\delta(q_2, _) = (q_3, 1, *)$$

100110

q_1 100110 \vdash 1 q_1 00110 \vdash 10 q_1 0110 \vdash 100 q_2 110 \vdash 1001 q_1 10 \vdash 10011 q_1 0 \vdash 100110 q_3 0