Examen 3er Parcial – Autómata de Pila

Gramática

$$I_D \rightarrow LR_I \mid \_R_I$$

$$R_I \rightarrow LR_I \mid DR_I \mid \_R_I \mid \varepsilon$$

$$L \rightarrow A \ldots Z \mid a \ldots z$$

$$D \rightarrow 0 \ldots 9$$

Formalización

$$\sum = \{ A \ldots Z , a \ldots z , 0 \ldots 9, \_ \}$$

$$\Gamma = \{ A \ldots Z , a \ldots z , 0 \ldots 9 , \_ , \varepsilon , I_D , R_I, L , D \}$$

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

$$q_0 = \{ q_0 \}$$

$$Z_0 = \{ \$ \}$$

$$F = \{ q_3 \}$$

Transiciones

$\delta(q_0, \varepsilon, \varepsilon; q_1, \$)$

$\delta(q_1, \varepsilon, \varepsilon; q_2, I_D)$

$\delta(q_2, \varepsilon, I_D; q_2, LR_I)$

$\delta(q_2, \varepsilon, I_D; q_2, \_R_I)$

$\delta(q_2, \varepsilon, R_I; q_2, LR_I)$

$\delta(q_2, \varepsilon, R_I; q_2, DR_I)$

$\delta(q_2, \varepsilon, R_I; q_2, \_R_I)$

$\delta(q_2, \varepsilon, R_I; q_2, \varepsilon)$

$\delta(q_2, \varepsilon, L; q_2, A \ldots Z)$

$\delta(q_2, \varepsilon, L; q_2, a \ldots z)$

$\delta(q_2, \varepsilon, D; q_2, 0 \ldots 9)$

$\delta(q_2, \_, \_; q_2, \varepsilon)$

$\delta(q_2, A \ldots Z, A \ldots Z; q_2, \varepsilon)$

$\delta(q_2, a \ldots z, a \ldots z; q_2, \varepsilon)$

$\delta(q_2, 0 \ldots 9, 0 \ldots 9; q_2, \varepsilon)$

$\delta(q_2, \varepsilon, \$; q_3, \varepsilon)$

Ejemplo w= contador3

$(q_0, \text{contador3}, \varepsilon)$

$(q_1, \text{contador3}, \$)$

$(q_2, \text{contador3}, I_D\$)$

$(q_2, \text{contador3}, LR_I\$)$

$(q_2, \text{contador3}, cR_I\$)$

$(q_2, \text{ontador3}, R_I\$)$

$(q_2, \text{ontador3}, LR_I\$)$

$(q_2, \text{ontador3}, oR_I\$)$

$(q_2, \text{ntador3}, R_I\$)$

$(q_2, \text{ntador3}, LR_I\$)$

$(q_2, \text{ntador3}, nR_I\$)$

$(q_2, \text{tador3}, R_I\$)$

$(q_2, \text{tador3}, LR_I\$)$

$(q_2, \text{tador3}, tR_I\$)$

$(q_2, \text{ador3}, R_I\$)$

$(q_2, \text{ador3}, LR_I\$)$

$(q_2, \text{ador3}, aR_I\$)$

$(q_2, \text{dor3}, R_I\$)$

$(q_2, \text{dor3}, LR_I\$)$

$(q_2, \text{dor3}, dR_I\$)$

$(q_2, \text{or3}, R_I\$)$

$(q_2, \text{or3}, LR_I\$)$

$(q_2, \text{or3}, oR_I\$)$

$(q_2, \text{r3}, R_I\$)$

$(q_2, \text{r3}, LR_I\$)$

$(q_2, \text{r3}, rR_I\$)$

$(q_2, 3, R_I\$)$

$(q_2, 3, DR_I\$)$

$(q_2, 3, 3R_I\$)$

$(q_2, \varepsilon, R_I\$)$

$(q_2, \varepsilon, \$)$

$(q_3, \varepsilon, \varepsilon)$ Aceptado