

GRAMÁTICA 3

ES \rightarrow SEN

EN \rightarrow DR

R \rightarrow DR $\mid \epsilon$

D \rightarrow 0...9

S \rightarrow + \mid - $\mid \epsilon$

(A) $\Sigma = \{ 0...9, +, - \}$

(P) $r = \{ 0...9, +, -, \epsilon, \$ \}$

(A) $Q = \{ q_0, q_1, q_2, q_3 \}$

(A) $q_0 = \{ q_0 \}$

(P) $z_0 = \{ \$ \}$

(A) $F = \{ q_3 \}$

DERIVACIONES DE LA GRAMÁTICA:

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

$\delta(q_1, \epsilon, \epsilon; q_2, ES)$

$\delta(q_1, \epsilon, ES; q_2, SEN)$

$\delta(q_2, \epsilon, EN; 2, DR)$

$\delta(q_2, \epsilon, R; q_2, DR)$

$\delta(q_2, \epsilon, R; q_2, \epsilon)$

$\delta(q_2, \epsilon, D; q_2, 0..9)$

$\delta(q_2, \epsilon, S; q_2, +)$

$\delta(q_2, \epsilon, S; q_2, -)$

$\delta(q_2, \epsilon, S; q_2, \epsilon)$

$\delta(q_2, 0..9, 0..9; q_2, \epsilon)$

$\delta(q_2, +, +; q_2, \epsilon)$

$\delta(q_2, -, -; q_2, \epsilon)$

$\delta(q_2, \epsilon, \$; q_2, \epsilon)$

(A) : Del Autómata.

(P) : De la pila.

VALIDACIÓN DE UNA CADENA

ENTRADA	PILA	ESTADO	TRANSICIÓN
-435	ϵ	q	δ
-435	ϵ	q0	$\delta (q0, \epsilon, \epsilon; q1 \$)$
-435	\$	q1	$\delta (q1, \epsilon, \epsilon; q2, ES)$
-435	ES\$	q2	$\delta (q2, \epsilon, ES; Q2, SEN)$
-435	SEN\$	q2	$\delta (q2, \epsilon, S; q2, -)$
-435	-EN\$	q2	$\delta (q2, -, -; q2, \epsilon)$
435	EN\$	q2	$\delta (q2, \epsilon, EN; q2, DR)$
435	DR\$	q2	$\delta (q2, \epsilon, DR; q2, D)$
435	DR\$	q2	$\delta (q2, \epsilon, D; q2, 0..9)$
435	4R\$	q2	$\delta (q2, 4, 4; q2, \epsilon)$
35	R\$	q2	$\delta (q2, \epsilon, R; q2, DR)$
35	DR\$	q2	$\delta (q2, \epsilon, DR; q2, D)$
35	DR\$	q2	$\delta (q2, \epsilon, D; q2, 0..9)$
35	3R\$	q2	$\delta (q2, 3, 3; q2, \epsilon)$
5	R\$	q2	$\delta (q2, 3, R; q2, DR)$
5	DR\$	q2	$\delta (q2, \epsilon, DR; q2, D)$
5	DR\$	q2	$\delta (q2, \epsilon, D; q2, 0..9)$
5	5R\$	q2	$\delta (q2, 5, 5; q2, \epsilon)$
ϵ	R\$	q2	$\delta (q2, \epsilon, R; q2, \epsilon)$
ϵ	\$	q2	$\delta (q2, \epsilon, \$; q3, \epsilon)$
ϵ	ϵ	q3	ACEPTADA