

## Gramática Analizador Léxico

Gramática: crl

$$G = (N, T, P, S)$$

$$N = \{c, r, l\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow crl$$

Gramática: Importar

$$G = (N, T, P, S)$$

$$N = \{I, m, p, o, r, t, a\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow \text{Importar}$$

Gramática: Incerteza

$$G = (N, T, P, S)$$

$$N = \{I, n, c, e, r, t, z, a\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$s_0 \rightarrow \text{Incerteza}$

Gramática: Double

$G = (N, T, P, S)$

$N = \{D, o, u, b, l, e\}$

$T = \{s_0\}$

$S = \{s_0\}$

$P =$

$s_0 \rightarrow \text{Double}$

Gramática: Boolean

$G = (N, T, P, S)$

$N = \{B, o, l, e, a, n\}$

$T = \{s_0\}$

$S = \{s_0\}$

$P =$

$s_0 \rightarrow \text{Boolean}$

Gramática: String

$G = (N, T, P, S)$

$N = \{S, t, r, i, n, g\}$

$T = \{s_0\}$

$S = \{s_0\}$

$P =$

$s0 \rightarrow \text{String}$

Gramática: Int

$G = (N, T, P, S)$

$N = \{I, n, t\}$

$T = \{s0\}$

$S = \{s0\}$

$P =$

$s0 \rightarrow \text{Int}$

Gramática: Char

$G = (N, T, P, S)$

$N = \{C, h, a, r\}$

$T = \{s0\}$

$S = \{s0\}$

$P =$

$s0 \rightarrow \text{Char}$

Gramática: Void

$G = (N, T, P, S)$

$N = \{V, o, i, d\}$

$T = \{s0\}$

$S = \{s0\}$

$P =$

$s0 \rightarrow \text{Void}$

Gramática: true

$G = (N, T, P, S)$

$N = \{t, r, u, e\}$

$T = \{s0\}$

$S = \{s0\}$

$P =$

$s0 \rightarrow \text{true}$

Gramática: false

$G = (N, T, P, S)$

$N = \{f, a, l, s, e\}$

$T = \{s0\}$

$S = \{s0\}$

$P =$

$s0 \rightarrow \text{false}$

Gramática: Retorno

$G = (N, T, P, S)$

$N = \{R, e, t, o, r, n\}$

$T = \{s0\}$

$S = \{s0\}$

P =

s0 -> Retorno

Gramática: Principal

$G = (N, T, P, S)$

$N = \{P, r, i, n, c, , p, a, l\}$

$T = \{s0\}$

$S = \{s0\}$

P =

s0 -> Principal

Gramática: Si

$G = (N, T, P, S)$

$N = \{S, i\}$

$T = \{s0\}$

$S = \{s0\}$

P =

s0 -> Si

Gramática: Sino

$G = (N, T, P, S)$

$N = \{S, i, n, o\}$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow \text{Sino}$$

Gramática: Para

$$G = (N, T, P, S)$$

$$N = \{P, a, r\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow \text{Para}$$

Gramática: Mientras

$$G = (N, T, P, S)$$

$$N = \{M, i, e, n, t, r, a, s\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow \text{Mientras}$$

### Gramática: Detener

$$G = (N, T, P, S)$$

$$N = \{D, e, t, n, r\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow \text{Detener}$$

### Gramática: Continuar

$$G = (N, T, P, S)$$

$$N = \{C, o, n, t, i, , u, a, r\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow \text{Continuar}$$

### Gramática: Mostrar

$$G = (N, T, P, S)$$

$$N = \{M, o, s, t, r, a\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$s_0 \rightarrow \text{Mostrar}$

Gramática: DibujarAST

$G = (N, T, P, S)$

$N = \{D, i, b, u, j, a, r, A, S, T\}$

$T = \{s_0\}$

$S = \{s_0\}$

$P =$

$s_0 \rightarrow \text{DibujarAST}$

Gramática: DibujarEXP

$G = (N, T, P, S)$

$N = \{D, i, b, u, j, a, r, E, X, P\}$

$T = \{s_0\}$

$S = \{s_0\}$

$P =$

$s_0 \rightarrow \text{DibujarEXP}$

Gramática: DibujarTS

$G = (N, T, P, S)$

$N = \{D, i, b, u, j, a, r, T, S\}$



$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow \text{DibujarTS}$$

Gramatica: entero

$$d = [0 - 9]$$

$$G = (N, T, P, S)$$

$$N = \{d\}$$

$$T = \{s0, s1\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow d s1$$

$$s0 \rightarrow d$$

$$s1 \rightarrow d s0$$

Gramatica: decimal

$$d = [0 - 9]$$

$$G = (N, T, P, S)$$

$$N = \{d\}$$

$$T = \{s0, s1, s2, s3, s4\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow d s1$$

$$s0 \rightarrow d s2$$

$$s1 \rightarrow d s0$$

$$s2 \rightarrow . s3$$

$$s3 \rightarrow d s4$$

$$s3 \rightarrow d$$

$$s4 \rightarrow d s3$$

Gramatida: id

$\text{id} = [\text{a-zA-Z}_\text{ }]$

$G = (N, T, P, S)$

$N = \{\text{id}\}$

$T = \{s_0, s_1, s_2, s_3, s_4\}$

$S = \{s_0\}$

$P =$

$s_0 \rightarrow \text{id } s_0$

$s_0 \rightarrow \text{id}$

Gramatica: Cadena

$\text{cadena} = [\text{a} - \text{z}, \text{A} - \text{Z}]$

$G = (N, T, P, S)$

$N = \{", \text{cadena}, \text{entero}, \text{decimal}\}$

$T = \{s_0, s_1, s_2\}$

$$S = \{s_0\}$$

$$P =$$

$$s_0 \rightarrow " s_1$$

$$s_1 \rightarrow \text{cadena } s_2$$

$$s_1 \rightarrow \text{entero } s_2$$

$$s_1 \rightarrow \text{decimal } s_2$$

$$s_2 \rightarrow s_1$$

$$s_2 \rightarrow "$$

Gramatica: ==

$$G = (N, T, P, S)$$

$$N = \{=\}$$

$$T = \{s_0\}$$

$$S = \{s_0\}$$

$$P =$$

$$s0 \rightarrow ==$$

Gramatica: !=

$$G = (N, T, P, S)$$

$$N = \{!, =\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow !=$$

Gramatica: <=

$$G = (N, T, P, S)$$

$$N = \{<, =\}$$

$$T = \{s0\}$$

$$S = \{s_0\}$$

$$P =$$

$$s_0 \rightarrow \leq$$

Gramatica:  $\leq$

$$G = (N, T, P, S)$$

$$N = \{>, =\}$$

$$T = \{s_0\}$$

$$S = \{s_0\}$$

$$P =$$

$$s_0 \rightarrow \geq$$

Gramatica:  $\geq$

$$G = (N, T, P, S)$$

$$N = \{\&\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow \&$$

Gramatica: ||

$$G = (N, T, P, S)$$

$$N = \{\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow ||$$

Gramatica: |&

$$G = (N, T, P, S)$$

$$N = \{| \& \}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow | \&$$

Gramatica: !

$$G = (N, T, P, S)$$

$$N = \{| \& \}$$

$$T = \{s0\}$$

$$S = \{s0\}$$



$P =$

$s0 \rightarrow !$

Gramatica: ++

$G = (N, T, P, S)$

$N = \{+\}$

$T = \{s0\}$

$S = \{s0\}$

$P =$

$s0 \rightarrow ++$

Gramatica: --

$G = (N, T, P, S)$

$$N = \{-\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow --$$

Gramatica: +

$$G = (N, T, P, S)$$

$$N = \{+\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow +$$

Gramatica: -

$$G = (N, T, P, S)$$

$$N = \{-\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow -$$

Gramatica: \*

$$G = (N, T, P, S)$$

$$N = \{*\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

P =

$s0 \rightarrow *$

Gramatica: /

$G = (N, T, P, S)$

$N = \{/ \}$

$T = \{s0\}$

$S = \{s0\}$

P =

$s0 \rightarrow /$

Gramatica: %

$G = (N, T, P, S)$

$N = \{\% \}$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow \%$$

Gramatica:  $\wedge$

$$G = (N, T, P, S)$$

$$N = \{\wedge\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow \wedge$$

Gramatica:  $\sim$

$$G = (N, T, P, S)$$

$$N = \{\sim\}$$

$$T = \{s_0\}$$

$$S = \{s_0\}$$

$$P =$$

$$s_0 \rightarrow \sim$$

Gramatica: (

$$G = (N, T, P, S)$$

$$N = \{(\}$$

$$T = \{s_0\}$$

$$S = \{s_0\}$$

$$P =$$

$$s_0 \rightarrow ($$

Gramatica: )

$$G = (N, T, P, S)$$

$$N = \{ \}$$

$$T = \{s_0\}$$

$$S = \{s_0\}$$

$$P =$$

$$s_0 \rightarrow )$$

Gramatica: :

$$G = (N, T, P, S)$$

$$N = \{ : \}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow :$$

Gramatica: ;

$$G = (N, T, P, S)$$

$$N = \{;\}$$

$$T = \{s0\}$$

$$S = \{s0\}$$

$$P =$$

$$s0 \rightarrow ;$$

Gramatica: {



$$G = (N, T, P, S)$$

$$N = \{ " \{ " \}$$

$$T = \{ s_0 \}$$

$$S = \{ s_0 \}$$

$$P =$$

$$s_0 \rightarrow \{$$

Gramatica: }

$$G = (N, T, P, S)$$

$$N = \{ " \} " \}$$

$$T = \{ s_0 \}$$

$$S = \{ s_0 \}$$

$$P =$$

$s_0 \rightarrow \}$

Gramatica: =

$G = (N, T, P, S)$

$N = \{ " = " \}$

$T = \{ s_0 \}$

$S = \{ s_0 \}$

$P =$

$s_0 \rightarrow =$

Gramatica: ,

$G = (N, T, P, S)$

$N = \{ " , " \}$

$$T = \{s_0\}$$

$$S = \{s_0\}$$

$$P =$$

$$s_0 \rightarrow ,$$