

Tokens

< BOOL, >
< BREAK, >
< CASE, >
< FUNCTION, >
< GET, >
< IF, >
< INT, >
< LET, >
< PUT, >
< RETURN, >
< STRING, >
< SWITCH, >
< VOID, >
< ENT, num >
< CADENA, lex >
< ID, num >
< MULA, >
< ASIG, >
< COMA, >
< PCOMA, >
< PP, >
< PARIZ, >
< PARDE, >
< LLAVEIZ, >
< LLAVEDE, >

Opcionales

< SUM, > < DEFAULT, >
< RES, > < FALSE, >
< AND, > < TRUE, >
< OR, > < EOF, >
< NOTEQ, >
< EQUAL, >

Gramática

$S \rightarrow delS \mid \epsilon \mid F \mid = \mid B \mid , \mid ; \mid : \mid (\mid) \mid \{ \mid \} \mid + \mid - \mid * \mid A \mid ! \mid k \mid \& \mid C \mid$
 $\mid D \mid " E \mid l G \mid _ G \mid d H \mid / I$

$A \rightarrow =$

$B \rightarrow = \mid \lambda$

$C \rightarrow \&$

$D \rightarrow \mid$

$E \rightarrow c E \mid \backslash F \mid "$

$F \rightarrow c S E$

$G \rightarrow l G \mid d G \mid _ G \mid \lambda$

$H \rightarrow d H \mid \lambda$

$I \rightarrow / J$

$J \rightarrow c S J \mid c r S$

$k \rightarrow =$

$d = \text{dígito}$

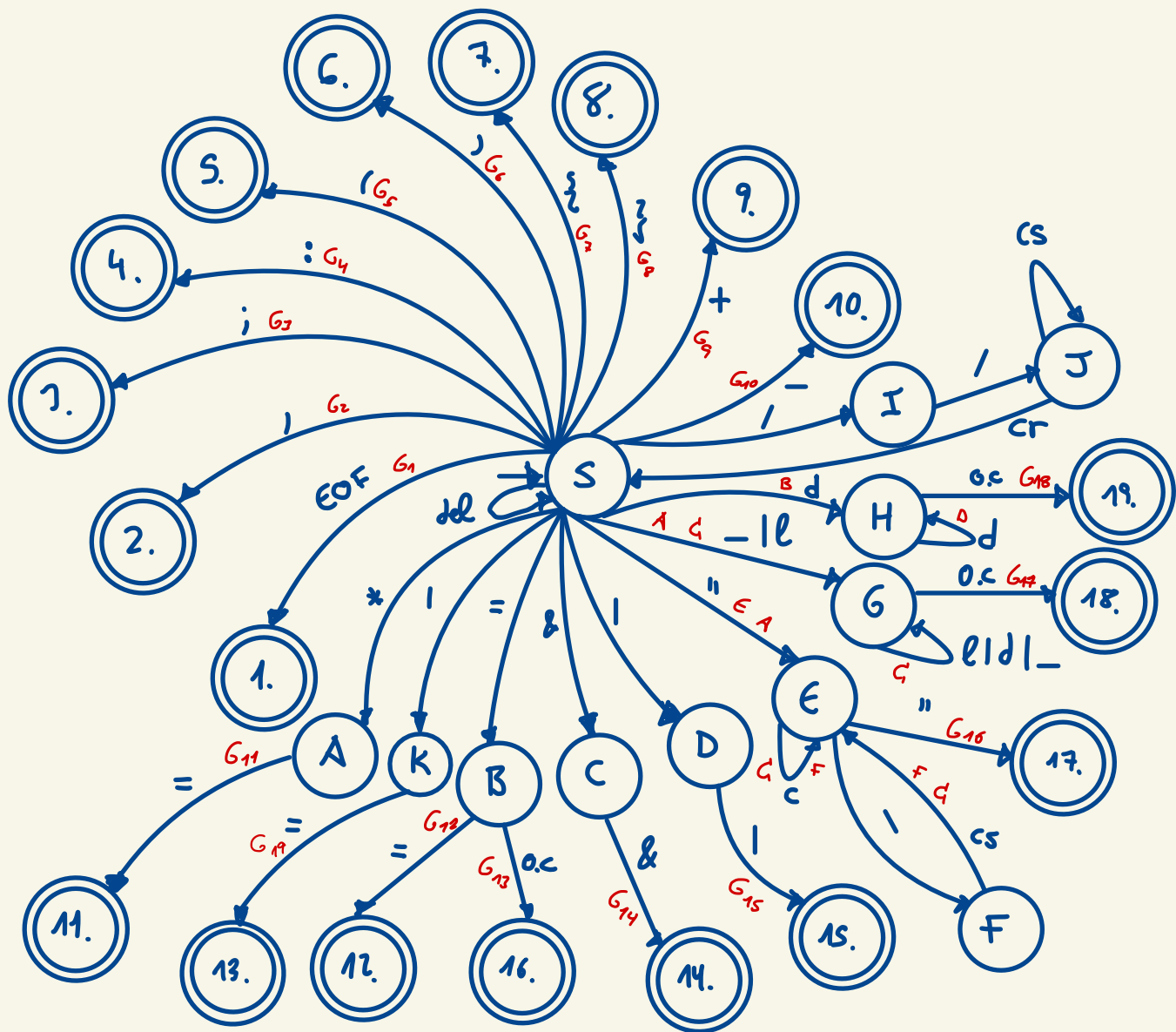
$l = \text{letra}$

$c ::= T - \{ ' \backslash ', ' " ', cr \}$
 \uparrow terminales

$cs ::= T - \{ cr \}$

$del ::= \{ \text{espacio en blanco, tabulador, } cr \}$
 \swarrow retorno de carro

AFD



* Lee en todas las transiciones menos o.c y EOF

Acciones Semánticas

L: leer
A: $lex := \phi$
C: $lex := lex \oplus C$ // concatenar
G₁: GenToken (EOF,)
:
:
G₁₅: GenToken (OR,)
G₁₈: GenToken (NOTEQ,)
B: num = valor(d)
D: num = num * 10 + valor(d)
G₁₈: if (num > 2⁴⁵) then Error (1, num)
 else GenToken (ENT, num)
E: cont := 0
F: cont := cont + 1
G₁₆: if (cont > 64) then Error (2, lex)
 else GenToken (CADENA, lex)
G₁₇: if (lex ∈ PalRes) {
 then Switch (lex) {
 case boolean: GenToken (BOOL,)
 break
 :
 :
 case true: GenToken (TRUE,)
 break
 }
 }
 else {
 pos := BuscaTs (lex)
 if (pos == NULL) then pos := InsertarTS (lex)
 GenToken (ID, pos)
 }
}

Error

1: "Entero fuera de rango"
2: "Cadena supera los 64 caracteres"

PalRes = { boolean, break, case, function, set, if, int, let, put, return, string, switch, void, default, false, true }