



GRAMÁTICA - 2019.2

- 0 <PROGRAMA> ::= "program" "identificador" ";" <BLOCO> "."
- 1 <BLOCO> ::= <DCLPROC> <DCLCONST> <DCLVAR> <CORPO>
- 2 <DCLCONST> ::= "const" "identificador" "=" <TIPO> ";" <LDCONST>
- 3 <DCLCONST> ::= $\hat{1}$
- 4 <LDCONST> ::= "identificador" "=" <TIPO> ";" <LDCONST>
- 5 <LDCONST> ::= $\hat{1}$
- 6 <DCLVAR> ::= "declaravariaveis" <LID> ":" <TIPO> ";" <LDVAR>
- 7 <DCLVAR> ::= $\hat{1}$
- 8 <LID> ::= "identificador" <REPIDENT>
- 9 <REPIDENT> ::= "," "identificador" <REPIDENT>
- 10 <REPIDENT> ::= $\hat{1}$
- 11 <LDVAR> ::= <LID> ":" <TIPO> ";" <LDVAR>
- 12 <LDVAR> ::= $\hat{1}$
- 13 <TIPO> ::= "array" "[" "numinteiro" ".." "numinteiro" "]" "of" <TIPOARRAY>
- 14 <TIPOARRAY> ::= "integer"
- 15 <TIPOARRAY> ::= "char"
- 16 <TIPOARRAY> ::= "string"
- 17 <TIPOARRAY> ::= "real"
- 18 <TIPO> ::= "integer"
- 19 <TIPO> ::= "char"

20 <TIPO> ::= "string"
 21 <TIPO> ::= "real"
 22 <DCLPROC> ::= "procedure" "identificador" <DEFPAR> <DCLVAR> <CORPO> ";" <DCLPROC>
 23 <DCLPROC> ::= $\hat{1}$
 24 <DEFPAR> ::= "(" <LID> ":" <TIPO> ";" <LDVAR> ")"
 25 <DEFPAR> ::= $\hat{1}$
 26 <CORPO> ::= "begin" <COMANDO> ";" <REPCOMANDO> "end"
 27 <REPCOMANDO> ::= <COMANDO> ";" <REPCOMANDO>
 28 <REPCOMANDO> ::= $\hat{1}$
 29 <COMANDO> ::= "if" "[" <EXPRESSAO> "]" "then" "begin" <COMANDO> "end" <ELSEPARTE>
 30 <COMANDO> ::= "while" "[" <EXPRESSAO> "]" "do" "begin" <COMANDO> "end"
 31 <COMANDO> ::= "repeat" <COMANDO> "until" "[" <EXPRESSAO> "]"
 32 <COMANDO> ::= "read" "(" <VARIABEL> ")"
 33 <COMANDO> ::= "chamaprocedure" "identificador" <PARAMETROS>
 34 <COMANDO> ::= "write" "(" <ITEMSAIDA> <REPITEM> ")"
 35 <COMANDO> ::= "for" "[" "identificador" "=" <EXPRESSAO> "]" "to" "[" <EXPRESSAO> "]"
 "do" "begin" <COMANDO> "end"
 36 <COMANDO> ::= $\hat{1}$
 37 <PARAMETROS> ::= "(" <LID> ")"
 38 <PARAMETROS> ::= $\hat{1}$
 39 <ITEMSAIDA> ::= "literal"
 40 <ITEMSAIDA> ::= <EXPRESSAO>
 41 <REPITEM> ::= "," <ITEMSAIDA> <REPITEM>
 42 <REPITEM> ::= $\hat{1}$
 43 <EXPRESSAO> ::= <TERMO> <REPEXP> <REPEXPSIMP>
 44 <TERMO> ::= <FATOR> <REPTERMO>
 45 <FATOR> ::= "numinteiro"
 46 <FATOR> ::= "identificador"
 47 <FATOR> ::= "nomestring"

48 <FATOR> ::= "nomechar"
 49 <FATOR> ::= "numreal"
 50 <FATOR> ::= "(" <EXPRESSAO> ")"
 51 <REPEXPSIMP> ::= "=" <EXPSIMP>
 52 <REPEXPSIMP> ::= "<" <EXPSIMP>
 53 <REPEXPSIMP> ::= ">" <EXPSIMP>
 54 <REPEXPSIMP> ::= ">=" <EXPSIMP>
 55 <REPEXPSIMP> ::= "<=" <EXPSIMP>
 56 <REPEXPSIMP> ::= "<>" <EXPSIMP>
 57 <REPEXPSIMP> ::= $\hat{=}$
 58 <EXPSIMP> ::= "+" <TERMO> <REPEXP>
 59 <EXPSIMP> ::= "-" <TERMO> <REPEXP>
 60 <EXPSIMP> ::= <TERMO> <REPEXP>
 61 <REPEXP> ::= "+" <TERMO> <REPEXP>
 62 <REPEXP> ::= "-" <TERMO> <REPEXP>
 63 <REPEXP> ::= "or" <TERMO> <REPEXP>
 64 <REPEXP> ::= $\hat{=}$
 65 <REPTERMO> ::= "*" <FATOR> <REPTERMO>
 66 <REPTERMO> ::= "/" <FATOR> <REPTERMO>
 67 <REPTERMO> ::= "and" <FATOR> <REPTERMO>
 68 <REPTERMO> ::= $\hat{=}$
 69 <ELSEPARTE> ::= "else" "begin" <COMANDO> "end"
 70 <ELSEPARTE> ::= $\hat{=}$
 71 <VARIABEL> ::= "identificador" <REPVARIABEL>
 72 <REPVARIABEL> ::= ", " "identificador" <REPVARIABEL>
 73 <REPVARIABEL> ::= $\hat{=}$

TERMINAIS

Cód	Token
0	write
1	while
2	until
3	to
4	then
5	string
6	repeat
7	real
8	read
9	program
10	procedure
11	or
12	of
13	literal
14	integer
15	if
16	identificador
17	î
18	for
19	end
20	else
21	do
22	declaravariaveis
23	const

24	char
25	chamaprocedure
26	begin
27	array
28	and
29	>=
30	>
31	=
32	<>
33	<=
34	<
35	+
36	numreal
37	numinteiro
38	nomestring
39	nomechar
40]
41	[
42	;
43	:
44	/
45	..
46	.
47	,
48	*
49)

50	(
51	\$
52	-

NÃO TERMINAIS

Cód	Token
53	<PROGRAMA>
54	<BLOCO>
55	<DCLPROC>
56	<DCLCONST>
57	<DCLVAR>
58	<CORPO>
59	<TIPO>
60	<LDCONST>
61	<LID>
62	<LDVAR>
63	<REPIDENT>
64	<TIPOARRAY>
65	<DEFPAR>
66	<COMANDO>
67	<REPCOMANDO>
68	<EXPRESSAO>
69	<ELSEPARTE>
70	<VARIABEL>
71	<REPVARIABEL>

72	<PARAMETROS>
73	<ITEMSAIDA>
74	<REPITEM>
75	<TERMO>
76	<REPEXP>
77	<REPEXPSIMP>
78	<FATOR>
79	<REPTERMO>
80	<EXPSIMP>