GRAMÁTICA LINGUAGEM 2M (LL1)(EBNF)

PROGRAM = (1)FUNCTIONS MAJORF

FUNCTIONS = (2)'id' PARAMS RETURNTYPE ESCOPE FUNCTIONS | (3)&

MAJORF = (4) 'major' 'paramBegin' 'paramEnd' 'tEmpty' ESCOPE

PARAMS = (5)'paramBegin' PARAMSFAT

PARAMSFAT = (6)'paramEnd' | (7)LISTPARAMS 'paramEnd'

LISTPARAMS = (8)TYPE NAME LISTPARAMSFAT

LISTPARAMSFAT = (9)'sep1' LISTPARAMS | (10)&

TYPE = (11)'tlnt' | (12)'tLong' | (13)'tLogic' | (14)'tChar' | (15)'tCchar' | (16)'tDec'

RETURNTYPE = (17)'tEmpty' | (18)TYPE RETURNTYPEFAT

RETURNTYPEFAT = (19)'arrayBegin' 'arrayEnd' | (20)&

NAME = (21)'id' NAMEFAT

NAMEFAT = (22)'arrayBegin' EXPRESSION 'arrayEnd' | (23)&

ESCOPE = (24)'escBegin' COMMANDS 'escEnd' 'term'

COMMANDS = (25)CMD 'term' COMMANDS | (26)E

CMD = (27)DECLARATION | (28)'id' CMDFAT | (29)PRINTOUT |

(30)READIN | (31)IFELSE | (32)WHILE | (33)DOWHILE |

(34)ITERATOR | (35)RETURN

DECLARATION = (36)TYPE NAME

CMDFAT = (37)ATTRIBUTION | (38)FUNCCALL

ATTRIBUTION = (39)NAMEFAT 'opAtrib' VALUE

VALUE = (40)ARRAY | EXPRESSION

ARRAY = (41) 'arrayBegin' ARRAYFAT

ARRAYFAT = (42)ELEMENTS 'arrayEnd' | (43)'arrayEnd'

ELEMENTS = (44)CONSTANT ELEMENTSFAT

ELEMENTSFAT = (45)'sep1' ELEMENTS | (46)&

CONSTANT = (47)'constNumInt' | (48)'constNumDec' | (49)'constLogic' |

(50)'constChar' | (51)'constCchar'

EXPRESSION(* Ver Gramática de Expressões *)

FUNCCALL = (52)'paramBegin' LISTPARAMSCALL 'paramEnd'

LISTPARAMSCALL = (53)PARAMITEM LISTPARAMSCALLFAT

LISTPARAMSCALLFAT = (54)'sep1' LISTPARAMSCALL | (55)&

PARAMITEM = (56)CONSTANT | (57)NAME

PRINTOUT = (58)'prPrintout' 'paramBegin' MESSAGE 'paramEnd'

MESSAGE = (59)'constCchar' MESSAGEFAT | (60)NAME MESSAGEFAT

MESSAGEFAT = (61)'opConc' MESSAGE | (62)&

READIN = (63)'prReadin' 'paramBegin' TYPE 'sep1' NAME 'paramEnd'

IFELSE = (64)IF ELSEIF ELSE

IF = (65)'prlf' 'paramBegin' EXPRESSION 'paramEnd' 'escBegin'

COMMANDS 'escEnd'

ELSEIF = (66)'prElseIf' paramBegin' EXPRESSION 'paramEnd' 'escBegin'

COMMANDS 'escEnd' ELSEIF | (67)&

ELSE = (68)'prElse' 'escBegin' COMMANDS 'escEnd' | (69)&

WHILE = (70)'prWhile' 'paramBegin' EXPRESSION 'paramEnd' 'escBegin'

COMMANDS 'escEnd'

DOWHILE = (71)'prDo' 'escBegin' COMMANDS 'escEnd'

'prWhile' 'paramBegin' EXPRESSION 'paramEnd'

ITERATOR = (72)'prlterator' 'paramBegin'

ATTRIBUTION 'sep2' EXPRESSION 'sep2' ATTRIBUTION

'paramEnd' 'escBegin' COMMANDS 'escEnd'

RETURN = (73)'prReturn' RETURNFAT

RETURNFAT = (74)CONSTANT | (75)NAME