start -> program

program -> function functions | epsilon

function -> FUNCTION ident SEMICOLON parameters declarations parameters declarations parameters statements parameters

parameters -> begin_params | end_params | begin_locals | end_locals | begin_body | end_body | parameters parameters

declarations -> declaration SEMICOLON declarations

declaration -> identify COLON INTEGER | identify COLON ARRAY L_SQUARE_BRACKET NUMBER R_SQUARE_BRACKET OF INTEGER

statements -> statement SEMICOLON statements | epsilon

statement -> var ASSIGN AS_expr | IF OR_expr THEN statements ENDIF | WHILE OR_expr

statements ENDLOOP | DO BEGINLOOP statements ENDLOOP WHILE OR_expr | FOR var ASSIGN | READ vars | WRITE vars | CONTINUE | RETURN AS_expr

OR_expr -> AND_expr OR OR_exp | AND_expr

AND_expr -> REL_expr AND AND_expr | REL_expr

REL_expr -> AS_expr comp AS_expr | L_PAREN OR_expr R_PAREN | TRUE | FALSE

comp -> GT | LT | GTE | LTE | EQ | NEQ

AS_expr -> MDM_expr | MDM_expr ADD AS_expr MDM_expr SUB AS_expr

MDM_expr -> NEG_term | NEG_term MOD MDM_expr | NEG_term MULT MDM_expr | NEG_term DIV MDM_expr

NEG_term -> SUB term | term identify L_PAREN EXP_term R_PAREN

term -> var | var L_SQUARE_BRACKET AS_expr R_SQUARE_BRACKET | L_PAREN AS_expr R_PAREN | NUMBER

var -> ident

ident -> IDENT