

Program:

Functions | ;

Functions:

Function Functions | ;

Declaration_Semi:

Declaration SEMICOLON ;

Declarations_Semi:

Declaration_Semi Declarations_Semi | ;

Statement_Semi:

Statement SEMICOLON ;

Statments_Semi:

Statement_Semi Statments_Semi | ;

Function:

FUNCTION Ident SEMICOLON BEGIN_PARAMS Declarations_Semi END_PARAMS
BEGIN_LOCALS Declarations_Semi END_LOCALS BEGIN_BODY Statments_Semi END_BODY
;

Identifiers:

Ident COMMA Identifiers | Ident | ;

Declaration:

Identifiers COLON ENUM L_PAREN Identifiers R_PAREN | Identifiers COLON INTEGER |
Identifiers COLON ARRAY L_SQUARE_BRACKET Number R_SQUARE_BRACKET OF INTEGER ;

Vars:

Var Vars | COMMA Var Vars | ;

Statement:

Var ASSIGN Expression | IF Bool-Expr THEN Statments_Semi ENDIF | IF Bool-Expr THEN
Statments_Semi ELSE Statments_Semi ENDIF | WHILE Bool-Expr BEGINLOOP Statments_Semi
ENDLOOP | DO BEGINLOOP Statments_Semi ENDLOOP WHILE Bool-Expr | READ Vars |
WRITE Vars | CONTINUE | RETURN Expression ;

Relation-And-Exprs:

OR Relation-And-Expr Relation-And-Exprs | ;

Bool-Expr:

Relation-And-Expr Relation-And-Exprs ;

Relation-Exprs:

AND Relation-Expr Relation-Exprs | ;

Relation-And-Expr:

Relation-Expr Relation-Exprs ;

Relation-Expr:

NOT Expression Comp Expression | NOT TRUE
| NOT FALSE | NOT L_PAREN Bool-Expr R_PAREN | Expression Comp Expression |
TRUE | FALSE | L_PAREN Bool-Expr R_PAREN ;

Comp:

EQ | NEQ | LT | GT | LTE | GTE ;

Multiplicative-Exprs:

ADD Multiplicative-Expr Multiplicative-Exprs | SUB Multiplicative-Expr Multiplicative-Exprs
| ;

Expression:

Multiplicative-Expr Multiplicative-Exprs ;

Terms:

MULT Term Terms | DIV Term Terms | MOD Term Terms | ;

Multiplicative-Expr:

Term Terms ;

Expressions:

Expression Expressions | COMMA Expression Expressions | ;

Term:

SUB Var | SUB Number | SUB L_PAREN Expression R_PAREN | Var | Number |
L_PAREN Expression R_PAREN | Ident L_PAREN Expressions R_PAREN ;

Var:

Ident | Ident L_SQUARE_BRACKET Expression R_SQUARE_BRACKET ;

Ident:

IDENT ;

Number:

NUMBER ;