PROGRAM -> STATEMENT
PROGRAM -> FUNCLIST
PROGRAM -> ε

FUNCLIST -> FUNCDEF FUNCLIST
FUNCLIST -> FUNCDEF

FUNCDEF -> def ident(PARAMLIST){STATELIST}

PARAMLIST -> int ident, PARAMLIST
PARAMLIST -> float ident, PARAMLIST
PARAMLIST -> string ident, PARAMLIST
PARAMLIST -> int ident
PARAMLIST -> float ident
PARAMLIST -> string ident
PARAMLIST-> ε

STATEMENT -> VARDECL;
STATEMENT -> ATRIBSTAT;
STATEMENT -> PRINTSTAT;
STATEMENT -> READSTAT;
STATEMENT -> RETURNSTAT;
STATEMENT -> IFSTAT
STATEMENT -> FORSTAT
STATEMENT -> {STATELIST}
STATEMENT -> break;
STATEMENT -> ;

VARDECL -> int ident VARDECLAUX
VARDECL -> float ident VARDECLAUX
VARDECL -> string ident VARDECLAUX
VARDECLAUX -> [int_constant]VARDECLAUX
VARDECLAUX -> [int_constant]
VARDECLAUX -> ε

ATRIBSTAT -> LVALUE = EXPRESSION
ATRIBSTAT -> LVALUE = ALOCEXPRESSION
ATRIBSTAT -> LVALUE = FUNCCALL

FUNCCAL -> ident(PARAMLISTCALL)

PARAMLISTCALL -> ident, PARAMLISTCALL
PARAMLISTCALL -> ident
PARAMLISTCALL -> ε

PRINTSTAT -> print EXPRESSION

READSTAT -> read LVALUE

RETURNSTAT -> return


IFSTAT -> if( EXPRESSION ) STATEMENT else STATEMENT
IFSTAT -> if( EXPRESSION ) STATEMENT

FORSTAT -> for(ATRIBSTAT; EXPRESSION; ATRIBSTAT ) STATEMENT

STATELIST -> STATEMENT STATELIST
STATELIST -> STATEMENT

ALLOCEXPRESSION -> new int [NUMEXPRESSION]ALLOCEXPRESSIONAUX
ALLOCEXPRESSION -> new float [NUMEXPRESSION]ALLOCEXPRESSIONAUX
ALLOCEXPRESSION -> new string [NUMEXPRESSION]ALLOCEXPRESSIONAUX
ALLOCEXPRESSIONAUX -> [NUMEXPRESSION]ALLOCEXPRESSIONAUX
ALLOCEXPRESSIONAUX -> ε

EXPRESSION -> NUMEXPRESSION
EXPRESSION -> NUMEXPRESSION < NUMEXPRESSION
EXPRESSION -> NUMEXPRESSION > NUMEXPRESSION
EXPRESSION -> NUMEXPRESSION <= NUMEXPRESSION
EXPRESSION -> NUMEXPRESSION >= NUMEXPRESSION
EXPRESSION -> NUMEXPRESSION == NUMEXPRESSION
EXPRESSION -> NUMEXPRESSION != NUMEXPRESSION

NUMEXPRESSION -> TERM NUMEXPRESSIONAUX
NUMEXPRESSIONAUX -> + TERM NUMEXPRESSIONAUX
NUMEXPRESSIONAUX -> - TERM NUMEXPRESSIONAUX
NUMEXPRESSIONAUX -> ε

TERM -> UNARYEXPR TERMAUX
TERMAUX ->  * UNARYEXPR TERMAUX]
TERMAUX ->  / UNARYEXPR TERMAUX
TERMAUX ->  % UNARYEXPR TERMAUX
TERMAUX -> ε

UNARYEXPR -> FACTOR
UNARYEXPR -> + FACTOR
UNARYEXPR -> - FACTOR

FACTOR -> int_constant
FACTOR -> float_constant
FACTOR -> string_constant
FACTOR -> null
FACTOR -> LVALUE
FACTOR -> (NUMEXPRESSION)

LVALUE-> ident LVALUEAUX

LVALUEAUX -> [NUMEXPRESSION] LVALUEAUX
LVALUEAUX -> ε