Semántica - C-

Diseño de compiladores - Doc. Víctor Manuel de la Cueva

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La librería ply es requerida para compilar este proyecto

Symbol Tables

Symbols	Order
Program	0
Declaration List	Х
Declaration var	2
Declaration	1
Function Declaration	2
Void	2
Compound Statement	0
Local Declarations	0
Statement List	0
Expression Statement	0
Expression	0
Var	0
Selection Statement	0
Iteration Statement	0
Return Statement	0
Simple or Additive Statement	0
Simple/Additive Statement	0
Arg List	0

Inference Rules

```
S' -> program
program -> declaration_list
declaration list -> declaration list declaration
declaration_list -> declaration
declaration -> var_declaration
declaration -> fun_declaration
var_declaration -> type_specifier ID SEMICOLON
var_declaration -> type_specifier ID LBRACK NUM RBRACK SEMICOLON type_specifier ->
INT
type specifier -> VOID
fun_declaration -> type_specifier ID LPAREN params RPAREN compound_stmt params ->
param_list
params -> VOID
param list -> param list COMA param
param_list -> param
param -> type_specifier ID
param -> type_specifier LBRACK RBRACK
compound_stmt -> LCURLY local_declarations statement_list RCURLY local_declarations ->
local declarations var declaration
local declarations -> <empty>
statement_list -> statement_list statement
statement list -> <empty>
statement -> expression_stmt
statement -> compound_stmt
statement -> selection stmt
statement -> iteration_stmt
statement -> return stmt
expression_stmt -> expression SEMICOLON
expression stmt -> SEMICOLON
selection stmt -> IF LPAREN expression RPAREN statement
selection stmt -> IF LPAREN expression RPAREN statement ELSE statement iteration stmt ->
WHILE LPAREN expression RPAREN statement return stmt -> RETURN SEMICOLON
return stmt -> RETURN expression SEMICOLON
expression -> var EQUALS expression
expression -> simple_expression
var -> ID
var -> ID LBRACK expression RBRACK
simple expression -> additive expression relop additive expression simple expression ->
additive_expression
relop -> LTHANEQ
relop -> LTHAN
relop -> GTHAN
relop -> GTHANEQ
relop -> EQUALTO
relop -> NOTEQUALTO
additive_expression -> additive_expression addop term
additive expression -> term
addop -> PLUS
addop -> MINUS
term -> term mulop factor
```

term -> factor mulop -> TIMES mulop -> DIVIDE factor -> LPAREN expression RPAREN factor -> ID factor -> NUM