

Rule	First	Follow
Program = decls "EOF"	Int, bool, void, EOF	\$
decls = typ "id" decls_prime   epsilon	Int, bool, void, epsilon	EOF
decls_prime = vdecl decls   fdecl decls	Semi, lparen	EOF
Fdecl = "lparen" formals_opt "rparen" "LBRACE" vdecl_list stmt_list "RBRACE"	lapren	Int, bool, void, EOF
formals_opt = formal_list   epsilon	Int, bool, void, epsilon	rparen
formal_list = typ "ID" formal_list_prime	Int, bool, void	rparen
Formal_list_prime = "COMMA" formal_list   epsilon	Comma, epsilon	rparen
typ = "INT"   "BOOL"   "VOID"	Int, bool, void	Id
vdecl_list = vdecl vdecl_list   "epsilon"	Epsilon, semi	RETURN, LBRACE, IF, FOR, WHILE, INTLITERAL, TRUE, FALSE, MINUS, NOT, ID, LPAREN, RBRACE
vdecl = "SEMI"	semi	"INT", "BOOL", "VOID", "EOF", "SEMI", "RETURN", RETURN, "LBRACE", IF, FOR, WHILE, INTLITERAL, TRUE, FALSE, MINUS, NOT, ID, LPAREN, "RBRACE"
stmt_list = stmt stmt_list   epsilon	$\epsilon$ , "RETURN", RETURN, "LBRACE", IF, FOR, WHILE, INTLITERAL, TRUE, FALSE, MINUS, NOT, ID, LPAREN, SEMI	RBRACE
stmt = "RETURN" stmt_prime  expr SEMI  "LBRACE" stmt_list RBRACE	RETURN, "LBRACE", IF, FOR, WHILE,	RETURN, LBRACE, IF, FOR, WHILE,

IF LPAREN expr RPAREN stmt stmt_prime_prime  FOR LPAREN expr_opt SEMI expr SEMI expr_opt RPAREN stmt  WHILE LPAREN expr RPAREN stmt	INTLITERAL, TRUE, FALSE, MINUS, NOT, ID, LPAREN, SEMI	INTLITERAL, TRUE, FALSE, MINUS, NOT, ID, LPAREN, RBRACE, NOELSE, ELSE, RBRACE
stmt_prime ->SEMI  expr SEMI	Semi, INTLiteral, true, false, id, minus, not, lparen	RETURN, LBRACE, IF, FOR, WHILE, INTLITERAL, TRUE, FALSE, MINUS, NOT, ID, LPAREN, SEMI, RBRACE, NOELSE, ELSE
Stmt_prime_prime = NOELSE   ELSE stmt	NOELSE, ELse	RETURN, “LBRACE”, IF, FOR, WHILE, INTLITERAL, TRUE, FALSE, MINUS, NOT, ID, LPAREN, “RBRACE”, NOELSE, ELSE, RBRACE
Expr_opt = expr   “epsilon”	INTLiteral, true, false, id, minus, not, lparen, epsilon	Semi, rparen
Expr = expr expr_prime_prime   ID expr_prime   LITERAL   TRUE   FALSE   MINUS expr %prec NEG   NOT expr   LPAREN expr RPAREN	INTLiteral, true, false, id, minus, not, lparen	SEMI, RPAREN, PLUS, MINUS, TIMES, DIVIDE, EQ, NEQ, LT, LEQ, GT, GEQ, AND, OR, NEG, COMMA, RAPEN
expr_prime = $\epsilon$   ASSIGN expr   LPAREN actuals_opt RPAREN	Assign, lparen, epsilon	SEMI, RPAREN, PLUS, MINUS, TIMES, DIVIDE, EQ, NEQ, LT, LEQ, GT, GEQ, AND, OR, NEG, COMMA, RPAREN
Expr_prime_prime = PLUS expr  MINUS expr  TIMES expr  DIVIDE expr  EQ expr  NEQ expr  LT expr  LEQ expr  GT expr  GEQ expr  AND expr  OR expr	Plus, minus, times, divide, EQ, NEQ, LT, LEQ, GT, GEQ, AND, OR, epsilon, Assign, Lparen	SEMI, RPAREN, PLUS, MINUS, TIMES, DIVIDE, EQ, NEQ, LT, LEQ, GT, GEQ, AND, OR, NEG, COMMA, RPAREN
Actuals_opt = actuals_list   epsilon	INTLiteral, true, false, id, minus, not, lparen, epsilon	rparen

actuals_list = expr actuals_list_prime	intLiteral, true, false, id, minus, not, lparen	rparen
Actuals_list_prime = COMMA expr actuals_list_prime   epsilon	COMMA, epsilon	rapren