

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	$\varepsilon$ , "RETURN", RETURN, "LBRACE", IF, FOR, WHILE, INTLITERAL, TRUE, FALSE, MINUS, NOT, ID, LPAREN, SEMI	RBRACE
stmt = expr SEMI   "RETURN" SEMI   RETURN expr SEMI   "LBRACE"	RETURN, "LBRACE", IF, FOR, WHILE,	RETURN, LBRACE, IF, FOR, WHILE,

stmt_list RBACE   IF LPAREN expr RPAREN stmt stmt_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, RBACE, NOELSE, ELSE, RBACE
Stmt_prime = NOELSE   ELSE stmt	NOELSE, ELse	RETURN, “LBRACE”, IF, FOR, WHILE, INTLITERAL, TRUE, FALSE, MINUS, NOT, ID, LPAREN, “RBACE”, NOELSE, ELSE, RBACE
Expr_opt = expr   “epsilon”	INTLiteral, true, false, id, minus, not, lparen, epsilon	Semi, rparen
Expr = INTLITERAL expr_prime   TRUE expr_prime   FALSE expr_prime   MINUS expr NEG expr_prime   NOT expr expr'   ID expr_prime_prime   LPAREN expr RPAREN expr_prime	INTLiteral, true, false, id, minus, not, lparen	Semi, rparen, Plus, minus, times, divide, EQ, NEQ, LT, LEQ, GT, GEQ, AND, OR, COMMA
expr_prime = PLUS expr expr_prime   MINUS expr expr_prime   TIMES expr expr'   DIVIDE expr expr_prime   EQ expr expr_prime   NEQ expr expr_prime   LT expr expr_prime   LEQ expr expr_prime   GT expr expr_prime   GEQ expr expr_prime   AND expr expr_prime   OR expr expr_prime   epsilon	Plus, minus, times, divide, EQ, NEQ, LT, LEQ, GT, GEQ, AND, OR, epsilon	SEMI, RPAREN, NEG, PLUS, MINUS, TIMES, DIVIDE, EQ, NEQ, LT, LEQ, GT, GEQ, AND, OR, COMMA
Expr_prime_prime = expr_prime   ASSIGN expr expr_prime   LPAREN actuals_opt RPAREN expr_prime	Plus, minus, times, divide, EQ, NEQ, LT, LEQ, GT, GEQ, AND, OR, epsilon, Assign, Lparen	SEMI, RPAREN, NEG, PLUS, MINUS, TIMES, DIVIDE, EQ, NEQ, LT, LEQ, GT, GEQ, AND, OR, COMMA
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

