/* GROUP 51

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program: DECLARE DEF DRIVERDEF

moduleDeclarations: epsilon DECLARE

otherModules: epsilon DEF

driverModule: DRIVERDEF

moduleDeclaration: DECLARE

module: DEF

moduleDef: START

inputPList: ID

ret: RETURNS epsilon

outputPList: ID

dataType: INTEGER REAL BOOLEAN ARRAY

iPList2: COMMA epsilon

type: INTEGER REAL BOOLEAN

oPList2: COMMA epsilon

arrRange: PLUS MINUS NUM ID

signedIndex: PLUS MINUS NUM ID

statements: epsilon GET_VALUE PRINT DECLARE SWITCH FOR WHILE ID SQBO USE

statement: GET_VALUE PRINT DECLARE SWITCH FOR WHILE ID SQBO USE

ioStmt: GET_VALUE PRINT

simpleStmt: ID SQBO USE

declareStmt: DECLARE

conditionalStmt: SWITCH

iterativeStmt: FOR WHILE

varPrint: ID NUM RNUM TRUE FALSE

arrIndex: SQBO epsilon

boolConst: TRUE FALSE

moduleReuseStmt: SQBO USE

assignmentStmt: ID

whichStmt: ASSIGNOP SQBO

IValueIDStmt: ASSIGNOP

IValueArrStmt: SQBO

expression: PLUS MINUS BO NUM RNUM TRUE FALSE ID

indexWithExpressions: PLUS MINUS ID NUM TRUE FALSE BO

sign: PLUS MINUS epsilon

index: NUM ID

optional: SQBO epsilon

actualPList: PLUS MINUS NUM RNUM TRUE FALSE ID

param: NUM RNUM TRUE FALSE ID

actualPList2: COMMA epsilon

arrIndexWithExpressions: SQBO epsilon

idList: ID

idList2: COMMA epsilon

arithmeticOrLogicalExpr: BO NUM RNUM TRUE FALSE ID

unaryOpExpr: PLUS MINUS

unaryOp: PLUS MINUS

unsignedArithExpr: BO ID NUM RNUM

arithmeticExpr: BO NUM RNUM TRUE FALSE ID

varIDNum: ID NUM RNUM

anyTerm: BO NUM RNUM TRUE FALSE ID

logicalOpExpr: epsilon AND OR

logicalOp: AND OR

relationOpExpr: epsilon LT LE GT GE EQ NE

relationalOp: LT LE GT GE EQ NE

term: BO NUM RNUM TRUE FALSE ID

addSubExpr: epsilon PLUS MINUS

addSubOp: PLUS MINUS

factor: BO NUM RNUM TRUE FALSE ID

mulDivExpr: epsilon MUL DIV

mulDivOp: MUL DIV

arrExpr: ID NUM TRUE FALSE BO

arrTerm: ID NUM TRUE FALSE BO

arrAddSubExpr: epsilon PLUS MINUS

arrFactor: ID NUM TRUE FALSE BO

arrMulDivExpr: epsilon MUL DIV

caseStmts: CASE

defaultCase: DEFAULT epsilon

caseValue: NUM TRUE FALSE

caseStmts2: CASE epsilon

forLoopRange: PLUS MINUS NUM

forLoopIndex: PLUS MINUS NUM