GROUP-8

AYUSH JAIN- 2017A7PS0093P

BHARAT BHARGAVA- 2017A7PS0025P

SATVIK GOLECHHA- 2017A7PS0117P

FIRST:

|  |  |
| --- | --- |
| <moduleDeclarations> | ε, DECLARE |
| <moduleDeclaration> | DECLARE |
| <otherModules> | ε, DEF |
| <driverModule> | DRIVERDEF |
| <module> | DEF, $, DRIVERDEF |
| <ret> | RETURNS, ε |
| <input\_plist\_lr> | COMMA, ε |
| <input\_plist> | ID |
| <output\_plist\_lr> | COMMA, ε |
| <output\_plist> | ID |
| <datatype> | INTEGER, REAL, BOOLEAN, ARRAY |
| <type> | INTEGER, REAL, BOOLEAN |
| <moduleDef> | START |
| <statements> | ε, GET\_VALUE, PRINT, DECLARE, FOR, WHILE, ID, USE, SQBO, SWITCH |
| <ioStmt> | GET\_VALUE, PRINT |
| <var> | ID, NUM, RNUM |
| <whichId> | SQBO, ε |
| <assignmentStmt> | ID |
| <lvalueIDStmt> | ASSIGNOP |
| <lvalueARRStmt> | SQBO |
| <index> | NUM, ID |
| <moduleReuseStmt> | USE, SQBO |
| <optional> | SQBO, ε |
| <idList\_lr> | COMMA, ε |
| <idList> | ID |
| <opt\_expr\_lr> | ε, AND, OR |
| <one\_more\_opt> | ε, LT, LE, GT, GE, EQ, NE |
| <booleanConst> | true, false |
| <arithmeticExpr\_lr> | ε, PLUS, MINUS |
| <term\_lr> | ε, MUL, DIV |
| <factor> | BO, ID, NUM, RNUM, PLUS, MINUS |
| <op> | PLUS, MINUS, MUL, DIV |
| <op1> | PLUS, MINUS |
| <op2> | MUL, DIV |
| <logicalOp> | AND, OR |
| <relationalOp> | LT, LE, GT, GE, EQ, NE |
| <declareStmt> | DECLARE |
| <value> | NUM, TRUE, FALSE |
| <caseStmt> | CASE |
| <default> | DEFAULT, ε |
| <conditionalStmt> | SWITCH |
| <range> | NUM |
| <iterativeStmt> | FOR, WHILE |
| <rangeArr> | NUM, ID |
| <statement> | GET\_VALUE, PRINT, DECLARE, FOR, WHILE, ID, USE, SQBO, SWITCH |
| <printOpt> | TRUE, FALSE, ID, NUM, RNUM |
| <simpleStmt> | ID, USE, SQBO |
| <whichStmt> | ASSIGNOP, SQBO |
| <program> | DECLARE, DRIVERDEF, DEF |
| <term> | BO, ID, NUM, RNUM |
| <arithmeticExpr> | BO, ID, NUM, RNUM |
| <opt\_expr> | BO, ID, NUM, RNUM, TRUE, FALSE |
| <expression> | BO, ID, NUM, RNUM, PLUS, MINUS, TRUE, FALSE |

FOLLOW:

|  |  |
| --- | --- |
| <program> | $ |
| <moduleDeclarations> | DRIVERDEF, DEF |
| <moduleDeclaration> | DECLARE, DRIVERDEF, DEF |
| <otherModules> | DRIVERDEF, $ |
| <driverModule> | DEF, $ |
| <module> | DEF, DRIVERDEF, $ |
| <ret> | START |
| <input\_plist\_lr> | SQBC |
| <input\_plist> | SQBC |
| <output\_plist\_lr> | SQBC |
| <output\_plist> | SQBC |
| <datatype> |  |
| <rangeArr> | SQBC |
| <type> | COMMA, SQBC |
| <moduleDef> | DEF, DRIVERDEF, $ |
| <statements> | END, BREAK |
| <statement> | GET\_VALUE, PRINT, DECLARE, FOR, WHILE, ID, USE, SQBO, SWITCH, END, BREAK |
| <ioStmt> | GET\_VALUE, PRINT, DECLARE, FOR, WHILE, ID, USE, SQBO, SWITCH, END, BREAK |
| <var> | MUL, DIV, BC, PLUS, MINUS, LT, LE, GT, GE, EQ, NE, AND, OR, SEMICOL |
| <whichId> | MUL, DIV, BC, PLUS, MINUS, LT, LE, GT, GE, EQ, NE, AND, OR, SEMICOL |
| <printOpt> | BC |
| <simpleStmt> | GET\_VALUE, PRINT, DECLARE, FOR, WHILE, ID, USE, SQBO, SWITCH, END, BREAK |
| <assignmentStmt> | GET\_VALUE, PRINT, DECLARE, FOR, WHILE, ID, USE, SQBO, SWITCH, END, BREAK |
| <whichStmt> | GET\_VALUE, PRINT, DECLARE, FOR, WHILE, ID, USE, SQBO, SWITCH, END, BREAK |
| <lvalueIDStmt> | GET\_VALUE, PRINT, DECLARE, FOR, WHILE, ID, USE, SQBO, SWITCH, END, BREAK |
| <lvalueARRStmt> | GET\_VALUE, PRINT, DECLARE, FOR, WHILE, ID, USE, SQBO, SWITCH, END, BREAK |
| <index> | SQBC, RANGEOP |
| <moduleReuseStmt> | GET\_VALUE, PRINT, DECLARE, FOR, WHILE, ID, USE, SQBO, SWITCH, END, BREAK |
| <optional> | USE |
| <idList\_lr> | COLON, SQBC, SEMICOL |
| <idList> | COLON, SQBC, SEMICOL |
| <expression> | BC, SEMICOL |
| <opt\_expr\_lr> | BC, SEMICOL |
| <opt\_expr> | AND, OR, BC, SEMICOL |
| <one\_more\_opt> | AND, OR, BC, SEMICOL |
| <booleanConst> | AND, OR, BC, SEMICOL |
| <arithmeticExpr\_lr> | BC, LT, LE, GT, GE, EQ, NE, AND, OR, SEMICOL |
| <arithmeticExpr> | BC, LT, LE, GT, GE, EQ, NE, AND, OR, SEMICOL |
| <term\_lr> | PLUS, MINUS, BC, LT, LE, GT, GE, EQ, NE, AND, OR, SEMICOL |
| <term> | PLUS, MINUS, BC, LT, LE, GT, GE, EQ, NE, AND, OR, SEMICOL |
| <factor> | MUL, DIV, PLUS, MINUS, BC, LT, LE, GT, GE, EQ, NE, AND, OR, SEMICOL |
| <op> |  |
| <op1> | BO, ID, NUM, RNUM, PLUS, MINUS |
| <op2> | BO, ID, NUM, RNUM, PLUS, MINUS |
| <logicalOp> | BO, ID, NUM, RNUM, PLUS, MINUS, TRUE, FALSE |
| <relationalOp> | BO, ID, NUM, RNUM, PLUS, MINUS |
| <declareStmt> | GET\_VALUE, PRINT, DECLARE, FOR, WHILE, ID, USE, SQBO, SWITCH, END, BREAK |
| <value> | COLON |
| <caseStmt> | ID, DEFAULT |
| <default> | END |
| <conditionalStmt> | GET\_VALUE, PRINT, DECLARE, FOR, WHILE, ID, USE, SQBO, SWITCH, END, BREAK |
| <range> | BC |
| <iterativeStmt> | GET\_VALUE, PRINT, DECLARE, FOR, WHILE, ID, USE, SQBO, SWITCH, END, BREAK |