

**Batch 14: Ishan Sharma (2016B2A70773P), Sarthak Sahu (2015B5A70749P),
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<Non Terminal>	First Set	Follow Set
program	DECLARE, DEF, DRIVERDEF	\$
moduleDeclarations	DECLARE, ϵ	DEF, DRIVERDEF
moduleDeclaration	DECLARE	DEF, DRIVERDEF, DECLARE
otherModules	DEF, ϵ	DRIVERDEF, \$
driverModule	DRIVERDEF	DRIVERDEF, \$
module	DEF	DEF, \$
ret	RETURNS, ϵ	START
input_plist	ID	SQBC
input_plist_again	COMMA, ϵ	SQBC
output_plist	ID	SQBC
output_plist_again	COMMA, ϵ	SQBC
dataType	INTEGER, REAL, BOOLEAN, ARRAY	SQBC, COMMA, SEMICOL
type	INTEGER, REAL, BOOLEAN	SQBC, COMMA
moduleDef	START	DEF, \$
statements	GET_VALUE, PRINT, ID, DECLARE, SWITCH, FOR, USE, SQBO, WHILE ϵ	BREAK, END
statement	GET_VALUE, PRINT, ID, DECLARE, SWITCH, FOR, USE, SQBO, WHILE, ϵ	GET_VALUE, PRINT, ID, DECLARE, SWITCH, FOR, USE, SQBO, WHILE, END, BREAK
ioStmt	GET_VALUE, PRINT	GET_VALUE, PRINT, ID, DECLARE, SWITCH, FOR, USE, SQBO, WHILE, END, BREAK
var	ID, NUM, RNUM	PLUS, MINUS, MUL, DIV, LT, LE, GT, GE, EQ, NE, AND, OR, BC, SEMICOL
whichId	SQBO, ϵ	PLUS, MINUS, MUL, DIV, LT, LE, GT, GE, EQ, NE, AND, OR, BC, SEMICOL
simpleStmt	ID, SQBO, USE	GET_VALUE, PRINT, ID, DECLARE, SWITCH, FOR, USE, SQBO, WHILE, END, BREAK
assignmentStmt	ID	GET_VALUE, PRINT, ID, DECLARE, SWITCH, FOR, USE, SQBO, WHILE, END, BREAK
whichStmt	ASSIGNOP, SQBO	GET_VALUE, PRINT, ID, DECLARE, SWITCH, FOR, USE, SQBO, WHILE, END, BREAK
lvalueIDStmt	ASSIGNOP	GET_VALUE, PRINT, ID, DECLARE, SWITCH, FOR, USE, SQBO, WHILE, END, BREAK
lvalueARRStmt	SQBO	GET_VALUE, PRINT, ID, DECLARE, SWITCH, FOR, USE, SQBO, WHILE, END, BREAK
index	NUM, ID	SQBC
moduleReuseStmt	SQBO, USE	GET_VALUE, PRINT, ID, DECLARE, SWITCH, FOR, USE, SQBO, WHILE, END, BREAK
optional	SQBO, ϵ	USE
idList	ID	SQBC, SEMICOL, COMMA
idList_again	COMMA, ϵ	SQBC, SEMICOL, COMMA

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<Non Terminal>	First Set	Follow Set
expression	MINUS, BO, ID, NUM, RNUM, PLUS, TRUE FALSE	SEMICOL
unary	MINUS PLUS	SEMICOL
<arithmeticOrBooleanExpr>	BO, ID, NUM, RNUM, TRUE, FALSE	SEMICOL
<arithmeticOrBooleanExpr_again>	AND, OR, ϵ	SEMICOL
recTerm	BO, ID, NUM, RNUM, TRUE, FALSE	AND, OR, SEMICOL
recTerm_again	LT, LE, GT, GE, EQ, NE, ϵ	AND, OR, SEMICOL
arithmeticExpr	BO, ID, NUM, RNUM	AND, OR, LT, LE, GT, GE, NE, EQ, SEMICOL, BC
arithmeticExpr_again	PLUS, MINUS, ϵ	AND, OR, LT, LE, GT, GE, NE, EQ, SEMICOL, BC
term	BO, ID, NUM, RNUM	PLUS, MINUS, LT, LE, GT, GE, EQ, NE, AND, OR, BC, SEMICOL
term_again	MUL, DIV, ϵ	PLUS, MINUS, LT, LE, GT, GE, EQ, NE, AND, OR, BC, SEMICOL
factor	BO, ID, NUM, RNUM	PLUS, MINUS, MUL, DIV, LT, LE, GT, GE, EQ, NE, AND, OR, BC, SEMICOL
var	ID, NUM, RNUM	PLUS, MINUS, MUL, DIV, LT, LE, GT, GE, EQ, NE, AND, OR, BC, SEMICOL
booleanConstants	TRUE, FALSE	BC, COLON, AND, OR, SEMICOL
prec2_op	PLUS, MINUS	BO, ID, NUM, RNUM
prec1_op	MUL, DIV	BO, ID, NUM, RNUM
logicalOp	AND, OR	BO, ID, NUM, RNUM, TRUE, FALSE
relationalOp	LT, LE, GT, GE, EQ, NE	BO, ID, NUM, RNUM
declareStmt	DECLARE	GET_VALUE, PRINT, ID, DECLARE, SWITCH, FOR, USE, SQBO, WHILE, END, BREAK
conditionalStmt	SWITCH	GET_VALUE, PRINT, ID, DECLARE, SWITCH, FOR, USE, SQBO, WHILE, END, BREAK
caseStmts	CASE	DEFAULT, END
caseStmts_again	CASE, ϵ	DEFAULT, END
value	NUM, TRUE, FALSE	COLON
default	DEFAULT, ϵ	END
iterativeStmt	FOR, WHILE	GET_VALUE, PRINT, ID, DECLARE, SWITCH, FOR, USE, SQBO, WHILE, END, BREAK
range	NUM	SQBC, BC

**FIRST set of terminals are trivial as they include themselves only.
For every terminal <T> FIRST(<T>)= {T}**