

First Sets for the ERPLAG Language

<program>	{DECLARE, DEF, DRIVERDEF}
<moduleDeclarations>	{DECLARE, ϵ }
<moduleDeclaration>	{DECLARE}
<otherModules>	{DEF, ϵ }
<driverModule>	{DRIVERDEF}
<module>	{DEF}
<ret>	{RETURNS, ϵ }
<input_plist>	{ID}
<sub_input_plist>	{COMMA, ϵ }
<output_plist>	{ID}
<sub_output_plist>	{COMMA, ϵ }
<dataType>	{INTEGER, REAL, BOOLEAN, ARRAY}
<dynamicRange>	{NUM, ID}
<type>	{INTEGER, REAL, BOOLEAN}
<moduleDef>	{START}
<statements>	{GET_VALUE, PRINT, ID, SQBO, USE, DECLARE, SWITCH, FOR, WHILE, ϵ }
<statement>	{GET_VALUE, PRINT, ID, SQBO, USE, DECLARE, SWITCH, FOR, WHILE}
<ioStmt>	{GET_VALUE, PRINT}
<extended_var>	{ID, NUM, RNUM, TRUE, FALSE}
<var>	{ID, NUM, RNUM}
<whichId>	{SQBO, ϵ }

<simpleStmt>	{ID, SQBO, USE}
<assignmentStmt>	{ID}
<whichStmt>	{ASSIGNOP, SQBO}
<lvalueIDStmt>	{ASSIGNOP}
<lvalueARRStmt>	{SQBO}
<index>	{NUM, ID}
<moduleReuseStmt>	{SQBO, USE}
<optional>	{SQBO, ϵ }
<idList>	{ID}
<sub_idList>	{COMMA, ϵ }
<new_expression>	{PLUS, MINUS, BO, ID, NUM, RNUM}
<u>	{PLUS, MINUS}
<sub_u>	{BO, ID, NUM, RNUM}
<expression>	{BO, ID, NUM, RNUM, TRUE, FALSE}
<arithmeticExpr>	{BO, ID, NUM, RNUM}
<sub_arithmeticExpr>	{PLUS, MINUS, ϵ }
<term>	{BO, ID, NUM, RNUM}
<sub_term>	{MUL, DIV, ϵ }
<factor>	{BO, ID, NUM, RNUM}
<op1>	{PLUS, MINUS}
<op2>	{MUL, DIV}
<booleanExpr>	{BO, ID, NUM, RNUM, TRUE, FALSE}
<sub_booleanExpr>	{BO, ID, NUM, RNUM, TRUE, FALSE}

<logicalOp>	{AND, OR}
<relationalOp>	{LT, LE, GT, GE, EQ, NE}
<declareStmt>	{DECLARE}
<conditionalStmt>	{SWITCH}
<caseStmt>	{CASE}
<nullableCaseStmt>	{CASE, ϵ }
<value>	{NUM, TRUE, FALSE}
<default>	{DEFAULT, ϵ }
<iterativeStmt>	{FOR, WHILE}
<range>	{NUM}