EBNF Grammar สำหรับภาษา CSubset

Factor = Designator | Number | "(" Expression ")" .

Term = Factor { ("*" | "/" | "%") Factor } .

SimpleExpr = ["+" | " – "] Term { ("+" | " – ") Term } .

EqualityExpr = SimpleExpr [("<" | "<=" | ">" | ">=") SimpleExpr] .

Expression = EqualityExpr [("==" | " ! =") EqualityExpr] .

ConstExpression = Expression .

FieldList = VariableDeclaration {VariableDeclaration} .

StructType = "struct " Ident ["{" FieldList "}"] .

Type = Ident | StructType .

IdentArray = Ident { " [" ConstExpression "] " } .

IdentList = IdentArray { "," IdentArray } .

VariableDeclaration = Type IdentList "; " .

ConstantDeclaration = " const " Type Ident "=" ConstExpression "; " .

Designator = Ident { ("." Ident) | (" [" Expression "] ") } .

Assignment = Designator "=" Expression "; " .

ExpList = Expression { "," Expression } .

ProcedureCall = Ident "(" [ExpList] ")" "; " .

IfStatement = "if" "(" Expression ")" "{"StatementSequence "}" ["else" "{"
   StatementSequence "}"] .

WhileStatement = "while " "(" Expression ")" "{" StatementSequence "}" .

Statement = [Assignment | ProcedureCall | IfStatement | WhileStatement] .

StatementSequence = {Statement} .

FPSection = Type IdentArray .

FormalParameters = FPSection { "," FPSection } .

ProcedureHeading = Ident "(" [FormalParameters] ")" .

ProcedureBody = { ConstDeclaration | VariableDeclaration } StatementSequence .

ProcedureDeclaration = "void" ProcedureHeading "{" ProcedureBody "}" .

Program = { ConstantDeclaration | VariableDeclaration } ProcedureDeclaration
   {ProcedureDeclaration } .

Number and Ident are terminal symbols. Program is the start symbol.