Syntax:

program = “%” cmpdstmt “%”

cmpdstmt = “BEGIN” stmtlist “END”

stmtlist = stmt | stmt “;” stmtlist

stmt = simplestmt | structstmt

simplestmt = (declaration | iostmt | assignstmt) “;”

declaration = type “ “ IDENTIFIER “;”

type = simpletype | arraydecl

simpletype = “int” | “bool” | “string” **|”char”**

**while\_statement?**

arraydecl = simpletype “array” “[“ integer “]”

iostmt = (“cin” “>>” | “cout” “<<”) IDENTIFIER “;”

assignstmt = IDENTIFIER “=” expression;

expression = [expression (“+” | “-“)] term

term = term (“\*” | “/”) factor | factor

factor = “(“ expression “)” | IDENTIFIER |CONSTANT

structstmt = cmpdstmt | ifstmt | forstmt

ifstmt = “if” “(“ condition “)” stmt [“else” “(“ stmt “)”]

condition = expression RELATION expression

RELATION = “<” | “<=” | “==” | “>=” | “>” | “!=”

forstmt = “for” header stmt

header = “(“ “int” assignstmt “;” condition “;” assignment “)”