syntax.in

The words - predefined tokens are specified between " and ":

program = (decllist stmtlist) “;”.

decllist = declaration [decllist].

declaration = simpledecl | arraydecl | structdecl.

simpledecl = type identifier”;”.

type = “char” | “int”.

arraydecl = type identifier "[" number "]" “;”.

structdecl = "struct" identifier “[“ decllist “]” “;”.

stmtlist = stmt [stmtlist].

stmt = simplstmt | structstmt.

simplstmt = assignstmt | iostmt.

assignstmt = identifier “:=“ expression “;”.

var = identifier | noconst | char | constchar

expression = var | expression operator expression | “(“ expression operator expression “)”

operator = "+" | "-" | "/" | "\*" | "%".

iostmt = “read “ identifier “;” | “write\_to\_console(“ (identifier | noconst | char | constchar) “);”.

structstmt = ifstmt | whilestmt | forstmt.

ifstmt = "if(" condition ") [“ stmtlist “]“ [“else [“ stmtlist “]”] “;”

whilestmt = "while(" condition ") do [“ stmtlist “];”.

forstmt = "for(" assignstmt “,” condition “,” assignstmt ") [“ stmtlist “]”.

condition = expression relation expression.

relation = "<" | "<=" | "=" | "!=" | ">=" | ">".