

program := "program" identifier " , " { variables | constants | procedure } block " . "

variables := "var" identifier [":" "number"] { " , " identifier [":" "number"] } " , "

constants := "const" identifier ":" "number" { " , " identifier ":" "number" } " , "

procedure := "procedure" identifier "(" { "param" ((["out"] identifier) | number) } ")" [variables] block " , "

block := "begin" statement { statement } "end"

statement := set_statement | if_statement | while_statement | block " , " | procedure_statement

set_statement := identifier ":" "expression" " , "

while_statement := "while" "(" condition ")" block " , "

if_statement := "if" "(" condition ")" block " , " ["else" block " , "]

procedure_statement := "run" identifier "(" { (["out"] identifier) | number) } ")" " , "

condition := expression ("==" | "!=" | "<" | ">") expression

expression := ["+" | "-"] term { ("+" | "-") term }

term := factor { ("*" | "/") factor }

factor := identifier | number | "(" expression ")"

print := ("print" | "println") "(" (expression | (" " "string" " ") { ":" (expression | (" " "string" " ")) } " , "

string := ["^"] *

identifier := [a-zA-z]{1}[0-9a-zA-z-]{0, 31}

number := \d+(\.\d+)?