BNF

<program> ::= program <identifier> <compound statement>

<compound statement> ::= begin <statement'> end

<statement'> ::= <statement> <statement'> | <statement>

<statement> ::= <conditional statement> | <simple statement> ;

<conditional statement> ::= if <expression> <compound statement> <else_if statement> |
if <expression> <compound statement> <else_if statement> else <compound statement>

<else_if statement> ::= else_if <expression> <compound statement> <else_if statement> | ε

<simple statement> ::= <assignment statement> | <print statement> | <declaration statement>

<assignment statement> ::= <identifier> = <expression>

<print statement> ::= print_line ( <string literal> )

<declaration statement> ::= <type> <variable declaration'>

<variable declaration'> ::= , <variable declaration> <variable declaration'> | <variable declaration>

<variable declaration> ::= <identifier> | <identifier> = <expression>

<identifier> ::= identifier

<expression> ::= <simple expression> | <simple expression> <relational operator> <simple expression>

<simple expression> ::= <simple expression> <adding operator> <term> | <term>

<term> ::= <term> <multiplying operator> <factor> | <factor>

<factor> ::= <identifier> | <number literal> | ( <expression> )

<relational operator> ::= < | > | =

<adding operator> ::= + | -

<multiplying operator> ::= * | /

<string literal> ::= string_literal

<number literal> ::= number_literal

<type> ::= int

EBNF

<program> ::= program <identifier> <compound statement>

<compound statement> ::= begin {<statement>} <statement> end

<statement> ::= <conditional statement> | <simple statement> ;

<conditional statement> ::= if <expression> <compound statement>
{else_if <expression> <compound statement>}
[else <compound statement>]

<simple statement> ::= <assignment statement> | <print statement> | <declaration statement>

<assignment statement> ::= <identifier> = <expression>

<print statement> ::= print_line ( <string literal> )

<declaration statement> ::= <type> {<variable declaration> ,} <variable declaration>

<variable declaration> ::= <identifier> [ = <expression> ]

<identifier> ::= identifier

<expression> ::= <simple expression> [ <relational operator> <simple expression> ]

<simple expression> ::= {<term> <adding operator>} <term>

<term> ::= {<factor> <multiplying operator>} <factor>

<factor> ::= <identifier> | <number literal> | ( <expression> )

<relational operator> ::= ≤ | ≥ | =

<adding operator> ::= + | −

<multiplying operator> ::= * | /

<string literal> ::= string_literal

<number literal> ::= number_literal

<type> ::= int