PROGRAM = (λ | DECLARATION);

DECLARATION = "fn", IDENTIFIER, "(", {IDENTIFIER, {","}, (":"), ("i32" | "String"), ")", {"-", ">", ("i32" | "String")}, BLOCK;

BLOCK = "{", { STATEMENT }, "}" ;

STATEMENT = ({ASSIGNMENT | PRINT}, ";") | VAR_TYPE | WHILE | BLOCK | IF | RETURN;

WHILE = "enquanto", "(", RELEXPRESSION, ")" , STATEMENT ;

IF = "caso", "(", RELEXPRESSION, ")" , STATEMENT) , { "senao", STATEMENT } ;

VAR_TYPE = "var", IDENTIFIER, { ",", IDENTIFIER }, ":", ("i32" | "String") ;

ASSIGNMENT = IDENTIFIER, "=", RELEXPRESSION;

PRINT = "imprima", "(", RELEXPRESSION, ")" ;

EXPRESSION = TERM, { ("+" | "-" | "||"), TERM } ;

RELEXPRESSION = FACTOR, { ("==" | "<" | ">" | "."), FACTOR } ;

TERM = FACTOR, { ("*" | "/" | "&&"), FACTOR } ;

FACTOR = NUMBER | STRING | IDENTIFIER | (("+" | "-" | "!"), FACTOR) | ("(", RELEXPRESSION, ")") | ("leia", "(", ")");

DIGIT = (0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9) ;

NUMBER = DIGIT, { DIGIT } ;

LETTER = (a | ... | z | A | ... | Z) ;

IDENTIFIER = LETTER, {LETTER | DIGIT | "_"} ;

STRING = "", (LETTER | DIGIT), "";

RETURN = "retorne", RELEXPRESSION;