Here is the syntax description for the minimal subset of the Kotlin language that we will use in the interpreter:

Minimal Language Syntax

1. Variables

Variable declaration:

var variableName = value

variableName - variable name (Latin letters, digits, does not start with a digit).

value - number (integer or floating point).

Examples:

var x = 10

var y = 5

2. Arithmetic operations

Supported operations:

Addition: +

Subtraction: -

Multiplication: \*

Division: /

Remainder of division: %

Example:

Var z = x + y \* 2

3. Conditional constructs

If-else:

if (condition) {

// instructions

} else {

// instructions

}

condition - logical expression (comparison of variables, for example: < , > , == , !=, <= , >=).

instructions - a set of commands.

Example:

if (x > y) {

var result = x

} else {

var result = y

}

4. Loops

While:

while (condition) {

// instructions

}

condition - logical expression.

instructions - executed while condition is true.

Example:

var sum = 0

Var i = 1

while (i <= 10) {

sum = sum + i

i = i + 1

}

5. I/O (optional)

Output:

print(expression)

expression - any value, variable or result of the expression.

Example:

print(sum)