

Regular Expression Specifications

The following table outlines the Regular Expressions (RE) used to define the lexical structure of the language.

Token Category	Regular Expression
Keywords	(start finish loop condition declare output input function return break continue else)
Identifiers	[A-Z][a-z0-9_]{0,30}
Integer Literals	[+-]?[0-9]+
Floating-Point Literals	[+-]?[0-9]+\.[0-9]{1,6}([eE][+-]?[0-9]+)?
Boolean Literals	(true false)
String Literals	"([^\\"\\n] \\"\\ntr)*)"
Character Literals	'([^\''\\n] \''\\ntr)'
Arithmetic Operators	(* * [\+ - * /])
Relational Operators	(== != <= >= < >)
Logical Operators	(&& !)
Assignment Operators	(\+= \-= *= /= =)
Inc/Dec Operators	(\++ \--)
Punctuators	[\(\)\{\}\[\]\,;:]
Single-line Comment	##[^\n]*
Multi-line Comment	#\[^* *+[^#])**+##
Whitespace	[\t\r\n]+