weeJava Specification

weeJava is defined as a subset of the Java programming language we learned in the class. It allows the following operations, symbols, keywords and identifiers, which keep their original meaning as in Java.

Operators

weeJava supports the following operators. These operators are also used in Java. As you may realize, some operators in Java e.g., logic operators are not supported in **weeJava**

Name	Common name	Character sequence
OP_MULTIPLY	multiply	*
OP_DIVIDE	divide	/
OP_MOD	mod	%
OP_ADD	plus	+
OP_SUBTRACT	minus	-
OP_LESS	less than	<
OP_LESSEQUAL	less than or equal	<=
OP_GREATER	greater than	>
OP_GREATEREQUAL	greater than or equal	>=
OP_EQUAL	equal	==
OP_NOTEQUAL	not equal	!=
OP_ASSIGN	assignment	=

Symbols

Below are symbols that are allowed in **weeJava**. They are all the common symbols in Java.

Name	Common name	Character
LEFT_PAREN	left parenthesis	(
RIGHT_PAREN	right parenthesis)
LEFT_BRACE	left brace	{
RIGHT_BRACE	right brace	}
LEFT_BRACKET	left bracket	[
RIGHT_BRACKET	right bracket]
SEMICOLON	semi-colon	;
COMMA	comma	,

Keywords

The following table lists all reserved words in **weeJava**. As you can see, **weeJava** is a simplified version of Java and its keywords are a very small subset of Java keywords. Note that **weeJava** does not support floating-point numbers.

Name	String
KEYWORD_IF	If
KEYWORD_ELSE	else
KEYWORD_INT	int
KEYWORD_STRING	String
KEYWORD_PUBLIC	public
KEYWORD_CLASS	class
KEYWORD_VOID	void
KEYWORD_STATIC	static

Identifiers and literals

Identifiers can be variable/class names. Literals can be e.g. 19, "bla bla".

Name	Common name	Value
IDENTIFIER	variable names	as is
INTEGER	integer literal	as is, interpreted as a number, e.g. 19
STRING	string literal	the characters with the double quotes, e.g. "bla bla"

Hobbits methods

weeJava provides two methods that are popular among Hobbits.

Name	String	Comments
HOBBITS_SAY	HobbitsSay	The method call HobbitsSay() is equivalent to the Java method call System.out.println() in Java
HOBBITS_DO	HobbitsDo	The method call HobbitsDo(a,b) returns the result of a + b