

Group Name:	Section:
Member 1:	Member 3:
Member 2:	Member 4:

LOLCODE GRAMMAR

Use angle brackets (<,>) to denote abstractions. Type lexemes that have been defined in Project Requirement 01 using lowercase letters. If the lexemes have not yet been defined, add the newly defined lexemes at the last section of this document.

LHS	::=	RHS
<program>	::=	HAI <linebreak> <statement> <linebreak> KTHXBYE
<statement>	::=	WAZZUP <linebreak> <declaration> BUHBYE <linebreak> <statement> <expr> <declaration>
<declaration>	::=	I HAS A varident I HAS A varident ITZ <value>
<literal>	::=	numbr numbar yarn troof noob
<typecast>	::=	MAEK varident A <datatype> varident IS NOW A <datatype>
<datatype>	::=	NUMBR NUMBAR YARN TROOF NOOB
<expr>	::=	<print> <linebreak> <expr> <arithmetic> <linebreak> <expr> <bool> <linebreak> <expr> <assignment> <linebreak> <expr> <comparison> <linebreak> <expr> <conditional> <linebreak> <expr> <loop> <linebreak> <expr> <function> <linebreak> <expr> <input> <linebreak> <expr> <comment> <linebreak> <expr> <concat> <linebreak> <expr> <break> <linebreak> <expr> <return> ε
<conditional>	::=	WTF? <linebreak> <conditional> OMG <value> <linebreak> <expr> <linebreak> <conditional> OMGWTF <value> <linebreak> <expr> <linebreak> <conditional> O RLY? <linebreak> <conditional> YA RLY <linebreak> <expr> <linebreak> <conditional>

		NO WAI <linebreak> <expr> <linebreak> <conditional> OIC
<loop>	::=	IM IN YR loopident <loopop> YR varident TIL <comparison> <linebreak> <expr> <linebreak> IM OUTTA YR loopident IM IN YR loopident <loopop> YR varident WILE <comparison> <linebreak> <expr> <linebreak> IM OUTTA YR loopident
<break>	::=	GTFO
<loopop>	::=	UPPIN NERFIN
<function>	::=	(func declaration) HOW IZ I funcident <linebreak> <expr> linebreak IF U SAY SO HOW IZ I funcident <funcparam> <linebreak> <expr> <linebreak> IF U SAY SO (func call) HOW IZ I funcident HOW IZ I funcident <funcparam>
<funcparam>	::=	YR varident AN <funcparam> YR varident
<return>	::=	FOUND YR <value> GTFO
<comment>	::=	BTW commentstr OBTW commentstr <linebreak> TLDR
<concat>	::=	SMOOSH <valconnect>
<input>	::=	GIMMEH varident
<print>	::=	VISIBLE varident VISIBLE <expr> VISIBLE <literal>
<arithmetic>	::=	SUM OF <value> AN <value> DIFF OF <value> AN <value> PRODUKT OF <value> AN <value> QUOSHUNT OF <value> AN <value> MOD OF <value> AN <value> BIGGR OF <value> AN <value> SMALLR OF <value> AN <value>
<comparison>		BOTH SAEM <value> AN <value> DIFFRINT <value> AN <value>
<bool>	::=	BOTH OF <value> AN <value> EITHER OF <value> AN <value> WON OF <value> AN <value> NOT <value> ALL OF <valconnect> MKAY ANY OF <valconnect> MKAY
<valconnect>	::=	<value> AN <valconnect> <value>
<assignment>	::=	varident R <value>

<value>	::=	<arithmetic> <bool> <literal> varident funcident

NEWLY-ADDED LEXEMES

Put here the definition of the lexemes that have not yet been defined in Project Requirement 01.

LEXEME	Regular Expression