Grammer – BNF – Yahav Yehoshua Bariah - 326295417

expr   : comp-expr ((KEYWORD:AND|KEYWORD:OR) comp-expr)*

AND   : '&&'

OR   : '||'

comp-expr   : NOT comp-expr
                : arith-expr ((EE|LT|GT|LTE|GTE) arith-expr)*

NOT   : '!'

EE   : '=='

LT   : '<'

GT   : '>'

LTE   : '<='

GTE   : '>='

arith-expr   : term ((PLUS|MINUS) term)*

PLUS   : '+'

MINUS   : '-'

term   : factor ((MUL|DIV|MOD) factor)*

MUL   : '*'

DIV   : '/'

MOD   : '%'

factor   : (PLUS|MINUS) factor
                : call

call   : atom (LPAREN (expr (COMMA expr)*)? RPAREN)?

LPAREN   : '('

RPAREN   : ')'

COMMA   : ','

atom   : INT|IDENTIFIER
                : LPAREN expr RPAREN
                : Defun
                : Lambd

INT	: DIGIT*
DIGIT	: 0|1|2|3|4|5|6|7|8|9
IDENTIFIER	: (Char | '_')*
Char	: 'a' | 'b' | 'c' | 'd' | 'e' | 'f' | 'g' | 'h' | 'i' | 'j' | 'k' | 'l' | 'm' | 'n' | 'o' | 'p' | 'q' | 'r' | 's' | 't' | 'u' | 'v' | 'w' | 'x' | 'y' | 'z' | 'A' | 'B' | 'C' | 'D' | 'E' | 'F' | 'G' | 'H' | 'I' | 'J' | 'K' | 'L' | 'M' | 'N' | 'O' | 'P' | 'Q' | 'R' | 'S' | 'T' | 'U' | 'V' | 'W' | 'X' | 'Y' | 'Z'
Defun	: KEYWORD:Defun IDENTIFIER? LPAREN (IDENTIFIER (COMMA IDENTIFIER)*)? RPAREN ARROW expr
ARROW	: '->'
Lambd	: KEYWORD:Lambd IDENTIFIER ((COMMA IDENTIFIER)*)? DOT LPREAN expr RPAREN LPREAN INT ((COMMA NUMBER)*)? RPAREN
DOT	: '.'