

## 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	: LETTER (LETTER   DIGIT   '_' )*
LETTER	: '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	: '.'