

# B2L2A: Bebella's Language

- **Loops:**

while\_stmt: 'while' '(' test ')' ':' expr ['else' ':' expr] 'wend'

- **Condicionais:**

if\_stmt: 'if' '(' test ')' ':' suite ['else' ':' suite] 'end' 'if'

- **Variáveis:**

type\_specifier:

| int  
| bool

- **Funções:**

funcdef: 'def' NAME parameters ':' suite

parameters: '(' [typedarglist] ')'

test: or\_test ['if' or\_test 'else' test] | lambdef

annassign: ':' test ['=' test]

expr: xor\_expr ('|' xor\_expr)\*

exprlist: (expr|star\_expr) (',' (expr|star\_expr))\* [' ,']

star\_expr: '\*' expr

testlist: test (',' test)\* [' ,']

suite: simple\_stmt | NEWLINE INDENT stmt+ DEDENT

or\_test: and\_test ('or' and\_test)\*

and\_test: not\_test ('and' not\_test)\*

not\_test: 'not' not\_test | comparison

comparison: expr (comp\_op expr)\*

# <> isn't actually a valid comparison operator in Python. It's here for the

# sake of a `__future__` import described in PEP 401 (which really works :-)

lambdef\_nocond: 'lambda' [vararglist] ':' test\_nocond

test\_nocond: or\_test | lambdef\_nocond

xor\_expr: and\_expr ('^' and\_expr)\*

stmt: simple\_stmt | compound\_stmt

simple\_stmt: small\_stmt (';' small\_stmt)\* [';'] NEWLINE

small\_stmt: (expr\_stmt | del\_stmt | pass\_stmt | flow\_stmt |  
import\_stmt | global\_stmt | nonlocal\_stmt | assert\_stmt)

expr\_stmt: testlist\_star\_expr (annassign |  
('=' (yield\_expr|testlist\_star\_expr))\* )

vararglist: (vfpdef ['=' test] (',' vfpdef ['=' test])\* [' ,' [  
 '\*' [vfpdef] (',' vfpdef ['=' test])\* [' ,' ['\*\*' vfpdef [' ,']] ]

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    | '*' vfpdef ['']]
| '*' [vfpdef] (',' vfpdef ['=' test])* [',' ['**' vfpdef ['']]
| '*' vfpdef [''])
vfpdef: NAME
typedargslist: (tfpdef ['=' test] (',' tfpdef ['=' test])* [',' [
    '*' [tfpdef] (',' tfpdef ['=' test])* [',' ['**' tfpdef ['']]
    | '*' tfpdef ['']]
| '*' [tfpdef] (',' tfpdef ['=' test])* [',' ['**' tfpdef ['']]
| '*' tfpdef [''])
tfpdef: NAME ['=' test]
compound_stmt: if_stmt | while_stmt | for_stmt | try_stmt | with_stmt | funcdef | classdef |
decorated | async_stmt
testlist_star_expr: (test|star_expr) (',' (test|star_expr))* [',']
yield_expr: 'yield' [yield_arg]
yield_arg: 'from' test | testlist
Comp_op: arith_expr '<|>|'=' arith_expr
arith_expr: term (('+'|'|'or') term)*
term: factor (('*'|'|'and') factor)*
factor: ('+'|'|'not') factor | power
power: atom_expr ['**' factor]
atom_expr: ['await'] atom trailer*
atom: ('(' [yield_expr|testlist_comp] ')' |
    '[' [testlist_comp] ']' |
    '{' [dictorsetmaker] '}' |
    NAME | NUMBER | STRING+ | '...' | 'None' | 'True' | 'False')
testlist_comp: (test|star_expr) ( comp_for | (',' (test|star_expr))* [','] )
trailer: '(' [arglist] ')' | '[' subscriptlist ']' | '.' NAME
subscriptlist: subscript (',' subscript)* [',']
subscript: test | [test] ':' [test] [sliceop]
sliceop: ':' [test]
arglist: argument (',' argument)* [',']
dictorsetmaker: ( ((test ':' test | '*' expr)
    (comp_for | (',' (test ':' test | '*' expr))* [','])) |
    ((test | star_expr)
    (comp_for | (',' (test | star_expr))* [','])) )
comp_iter: comp_for | comp_if
sync_comp_for: 'for' exprlist 'in' or_test [comp_iter]
comp_for: ['async'] sync_comp_for
comp_if: 'if' test_nocond [comp_iter]
argument: ( test [comp_for] |
    test '=' test |
    '*' test |
    '*' test )

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