

Gramática MiniPython

Program -> 'class' ID ':' inicioBloque <field_decl>* finBloque <method_call>*

field_decl -> <assign>

method_decl -> 'def' ID ('(' ID (',' ID)* ')')? ':' <block>

block -> <inicioBloque><statement>*<finBloque>

<statement> -> ID <Statementtp>

| print <methodcall>

| read <methodcall>

| 'if' <expr> ':' ('elif' <expr> ':' <block>)* ('else' ':' <block>)

| 'while' <expr> ':' <block>

| 'for' ID 'in' <range> ':' <block>

| 'return' <expr>

| 'break'

<Statementtp> -> 'ID'

| = <assignP>

| [<assignP>

| (methodcall2

<assign> -> <lvalue> '=' <expr>

<assignP> -> ['<expr> ']' '=' <expr>

| '=' <expr>

<method_call> -> 'read' <lvalue>

| 'print' (<expr>(','<expr>)*)?

<method_call2> -> '('(<expr>(','<expr>)*)?')

<lvalue> -> ID
 | ID '[' <expr>']'

<expr> -> Logical
 | '–' <expr>
 | '~' <expr>
 | '[' <expr> (' , ' <expr>)* ']'

<exprP> -> '[' <expr> ']'
 | '(' <methodcall2>

<Logical> -> Relacional ('or' Relacional)*
 | Relacional ('and' Relacional)*

<Relacional> -> | AritmeticoSumaResta (!= AritmeticoSumaResta) *
 | AritmeticoSumaResta (<= AritmeticoSumaResta) *
 | AritmeticoSumaResta (>= AritmeticoSumaResta) *
 | AritmeticoSumaResta (== AritmeticoSumaResta) *
 | AritmeticoSumaResta (< AritmeticoSumaResta) *
 | AritmeticoSumaResta (> AritmeticoSumaResta) *

< AritmeticoSumaResta > -> Produccion ('+' Produccion) *
 | Produccion ('-' Produccion) *

<Produccion> -> Shift ('/' Shift) *
 | Shift('*' Shift)*
 | Shift ('%' Shift)*

<Shift> -> Term ('>>' Term) *
 |Term ('<<' Term)*

<Term> -> <constant>
 | '(' <expr> ')'
 | ID exprP

<inicioBloque> -> INDENT

<finBloque> -> DEDENT

<range> -> <expr> '...' <expr>

<constant> -> 'NUMBER' | 'CHARCONSTANT' | <bool_const>

<bool_const> -> 'TRUE' | 'FALSE'