

# Gramática MiniPython

<program>	->	'class' ID ':' <field_decl>* <method_decl>*
<field_decl>	->	<assign>
<method_dcl>	->	'def' ID ( '(' ID ( ',' ID)* ')' )? ':' <block>
<block>	->	'NEWLINE' <inicioBloque> <statement>+ <finBloque>
<statement>	->	<assign>  <method_call>  'if' <expr> ':' <block> ('elif' <expr> ':' <block>)* ('else' ':' <block>)  'while' <expr> ':' <block>  'for' ID 'in' <range> ':' <block>  'return' <expr>  'break'
<assign>	->	<lvalue> '=' <expr>
<method_call>	->	ID '(' (<expr>(','<expr>)*)? ')'  'print' (<expr>(','<expr>)*)?  'read' <lvalue>
<lvalue>	->	ID   ID '[' <expr> ']'
<expr>	->	<lvalue>  <method_call>  <constant>  <expr> <op_bin> <expr>   '-' <expr>

		'~' <expr>
		'(' <expr> ')'
		'[' <expr> (',' <expr>)* '']'
<InicioBloque>	->	INDENT
<FinBloque>	->	DEDENT
<range>	->	<expr>...<expr>
<op_bin>	->	<arith_op>
		<rel_op>
		<eq_op>
		<cond_op>
<arith_op>	->	'+'   '-'   '*'   '/'   '<<'   '>>'   '%'
<rel_op>	->	'<'   '>'   '<='   '>='
<eq_op>	->	'=='   '!='
<cond_op>	->	'and'   'or'   'not'
<constant>	->	'NUMBER'   'CHARCONSTANT'   <bool_const>
<bool_const>	->	'TRUE'   'FALSE'

### Tokens

Token	Lexema	Tipo
OP_SUM	+	Operador Aritmetico
OP_REST	-	Operador Aritmetico
OP_MULT	*	Operador Aritmetico
OP_DIV	/	Operador Aritimetico
OP_SLEFT	<<	Operador a nivel de Bits
OP_SRIGTH	>>	Operador a Nivel de Bits
OP_MOD	%	Operador Aritmetico
OP_MENOR	<	Operador Relacional
OP_MAYOR	>	Operador Relacional
OP_MEIG	<=	Operador Relacional
OP_MAIG	>=	Operador Relacional
OP_COMP	==	Operador de Igualdad
OP_DIST	i=	Operador de Igualdad
OP_AND	And	Palabra reservada
OP_OR	Or	Palabra reservada
OP_NOT	Not	Palabra reservada
LIT_NUM	Number	Literal numerica
LIT_CHCONST	Char Constante	Literal caracter
B_TRUE	True	Valor booleano
B_FALSE	False	valor booleano
KW_CLASS	Class	Palabra reservada
P_ID	ID	variable
KW_DEF	DEF	Palabra reservada
KW_IF	IF	Palabra reservada
KW_ELIF	ELIF	Palabra reservada
KW_ELSE	ELSE	Palabra reservada
KW_WHILE	WHILE	Palabra reservada
KW_FOR	FOR	Palabra reservada
KW_IN	IN	Palabra reservada
KW_RETURN	RETURN	Palabra reservada
KW_BREAK	BREAK	Palabra reservada
KW_PRINT	PRINT	Palabra reservada

<b>KW_READ</b>	<b>READ</b>	<b>Palabra reservada</b>
<b>SIGN_DP</b>	<b>:</b>	<b>Signo</b>
<b>SIGN_C</b>	<b>,</b>	<b>Signo</b>
<b>SIGN_CORI</b>	<b>[</b>	<b>Signo</b>
<b>SIGN_CORD</b>	<b>]</b>	<b>Signo</b>
<b>SIGN_PARI</b>	<b>(</b>	<b>Signo</b>
<b>SIGN_PARD</b>	<b>)</b>	<b>Signo</b>
<b>SIGN_NEG</b>	<b>~</b>	<b>Operador a Nivel de Bits</b>
<b>DEL_TAB</b>	<b>/tab</b>	<b>Delimitador</b>
<b>SIGN_ASSIG</b>	<b>=</b>	<b>Operador de asignacion</b>
<b>SIGN_RANG</b>	<b>...</b>	<b>Operador Rango</b>
<b>DEL_NLINE</b>	<b>NEWLINE</b>	<b>delimitador</b>
<b>V_IDNT</b>	<b>INDENT</b>	<b>virtual</b>
<b>V_DDENT</b>	<b>DEDENT</b>	<b>virtual</b>