```
odocs source parser
Load Grammar
                          Parser: Earley 💙

✓ Keep all tokens

      //tokens
      START_PROGRAM
                      : "Start "
      FINISH_PROGRAM : "Finish"
                      : "var "
      VAR
      WHILE
                      : "while"
                      : "if "
      ELSE
                      : "else "
                                                                                   TOTAL
                      : "def"
      RETURN
                      : "return"
                      : "class"
      CLASS
                      : "extends"
 11
      EXTENDS
                      : "print"
 12
      PRINT
      PRIVATE
                      : "Private"
13
                      : "Public"
      PUBLIC
14
15
      PROTECTED
                      : "Protected"
16
17
      LEFT_CURRLY_BRACES
                           : /{/
      RIGHT_CURRLY_BRACES
                           : /}/
18
      LEFT_PARENTHESIS : /\(/
19
      RIGHT_PARENTHESIS : /\)/
 20
 21
 22
      COMMA
                : /,/
                : /:/
 23
      COLON
 24
      NEW_LINE: /\n+/
 25
      WHITESPACE: (" " | /\t/ )+
 26
27
 28
      GREATER_THAN
                        : />/
                        : /</
      LESS_THAN
 30 LESS_EQUAL
      GREATER_EQUAL
                         : />=/
      NOT_EQUAL
                       : /!=/
 32
      EQUAL_COMPARATION : /==/
 33
      EQUAL
                       : /=/
 34
 35
 36
                       : /\+/
      PLUS
                       : /-/
 37
      MINUS
                       : /\*/
 38
      ASTERISK
 39
                       : /\//
 40
      SLASH
41
                    : "int"
 42
      INT_CTE
      FLOAT_CTE
                    : "float"
 43
      DOUBLE_CTE
                   : "double"
 44
      STRING_CTE
                  : "String"
 45
 46
      IDENTIFIER: /[a-zA-Z_][a-zA-Z0-9_]*/
47
      CONST_INT: /\d+/
 48
      CONST_FLOAT: /\d+(\.\d+)?/
 49
                : /".*"/
      STRING
 50
 51
 52
      %ignore WHITESPACE
 53
      %ignore NEW_LINE
 54
 55
      // rules
 56
 57
      start: programa
 58
      programa : START_PROGRAM bloque_global FINISH_PROGRAM
 59
 60
      bloque_global : LEFT_CURRLY_BRACES bg1 RIGHT_CURRLY_BRACES
 61
      bg1 : estatuto_global bg1 |
 62
 63
      estatuto_global : asignacion | condicion | escritura | class_declaration | cic
 64
 65
      asignacion : IDENTIFIER EQUAL expresion NEW_LINE
 66
      condicion : IF LEFT_PARENTHESIS expresion RIGHT_PARENTHESIS bloque condicion1
 69
      condicion1 : ELSE bloque |
70
      bloque: LEFT_CURRLY_BRACES b1 RIGHT_CURRLY_BRACES
71
      b1 : estatuto b1 |
72
73
                  : asignacion
74
      estatuto
75
                    condicion
76
                    escritura
77
                    ciclo
78
                    vars
 79
      // TO do
 80
      tipo: INT_CTE
 81
            FLOAT_CTE
 82
           STRING_CTE
 83
 84
      ciclo : WHILE LEFT_PARENTHESIS expresion RIGHT_PARENTHESIS bloque
 85
 86
      escritura : PRINT LEFT_PARENTHESIS esc1 esc2 RIGHT_PARENTHESIS NEW_LINE
 87
      esc1: expresion
 88
            STRING
 89
      esc2: COMMA esc1
 90
 91
 92
              : VAR vars2
      vars
 93
              : IDENTIFIER vars3
      vars2
              : COMMA vars2
 94
      vars3
               COLON tipo NEW_LINE
 95
 96
                  : exp expresion1
      expresion
 97
                 : expresion2 exp |
 98
      expresion1
      expresion2 : GREATER_THAN
99
                    LESS_THAN
100
                    EQUAL_COMPARATION
101
                    NOT_EQUAL
102
                    GREATER_EQUAL
103
                    LESS_EQUAL
104
105
      exp : termino ex1
      ex1 : ex2 exp |
107
      ex2 : PLUS | MINUS
108
109
      factor : factor1 | factor2
110
      factor1 : LEFT_PARENTHESIS expresion RIGHT_PARENTHESIS
111
      factor2 : factor3 var_cte
112
      factor3 : PLUS | MINUS |
113
114
      termino : factor t1
115
      t1 : t2 termino
116
117
      t2 : ASTERISK | SLASH
118
119
120
      class_declaration : class | class_extends
121
122
      class : LESS_THAN CLASS GREATER_THAN IDENTIFIER bloque_class
123
      //to do
124
125
      class_extends : //LESS_THAN CLASS GREATER_THAN IDENTIFIER EXTENDS class_cte b]
126
      function : DEF IDENTIFIER LEFT_PARENTHESIS function1 RIGHT_PARENTHESIS LEFT_(
127
      function1 : var_cte COMMA function1 |
128
129
      function2 : RETURN var_cte
130
      bloque_class : LEFT_CURRLY_BRACES bc1 content_class bc2 content_class bc3 cont
131
      bc1 : PRIVATE COLON |
132
      bc2 : PUBLIC COLON |
133
      bc3 : PROTECTED COLON |
134
135
      content_class : cc1 |
136
      cc1 : cc2 content_class
137
      cc2 : vars | function | asignacion
138
139
140
      // to do
      var_cte : IDENTIFIER
141
142
                CONST_INT
143
               CONST_FLOAT
                STRING
144
145
                //OBJECT
146
```

```
<u>full screen</u>
Start
  <class> Person
    Public:
      var num: int
      var spreak : String
      num = 4
      speak = "hola mundo"
  var aux : int
  aux = 4
  while (aux > 0) {
    print("hola mundo" )
    print("\n")
    aux = aux - 1
Finish
  ▼ start
    ▼ programa
         Start
       ▼ bloque_global
         ▼ bg1
            ▼ estatuto_global
              ▼ class_declaration
                 ▼ class
                     class
                     >
                     Person
                   ▼ bloque_class
                       bc1
                       content_class
                     ▼ bc2
                          Public
                     ▼ content_class
                        ▼ cc1
                          ▼ cc2
                             ▼ vars
                                  var
                               ▼ vars2
                                    num
                                  ▼ vars3
                                    ▼ tipo
                                         int
                         ▼ content_class
                             ▼ cc1
                               ▼ cc2
                                  ▼ vars
                                      var
                                    ▼ vars2
                                         spreak
                                       ▼ vars3
                                         ▼ tipo
                                             String
                                 content_class
                       bc3
                     ▼ content_class
                        ▼ cc1
                          ▼ cc2
                             ▼ asignacion
                                  num
                               ▼ expresion
                                  ▼ exp
                                    ▼ termino
                                       ▼ factor
                                         ▼ factor2
                                             factor3
                                             var_cte
                                        t1
                                      ex1
                                  ▼ expresion1
                                      expresion2
                                    ▼ exp
                                       ▼ termino
                                         ▼ factor
                                           ▼ factor2
                                                factor3
                                              ▼ var_cte
                                                   4
                                           t1
                                        ex1
                          ▼ content_class
                             ▼ cc1
                               ▼ cc2
                                  ▼ asignacion
                                       speak
                                       =
                                    ▼ expresion
                                       ▼ exp
                                         ▼ termino
                                           ▼ factor
                                              ▼ factor2
                                                  factor3
                                                  var_cte
                                             t1
                                           ex1
                                       ▼ expresion1
                                           expresion2
                                         ▼ exp
                                           ▼ termino
                                              ▼ factor
                                                ▼ factor2
                                                     factor3
                                                   ▼ var_cte
                                                        "hola mundo"
                                               t1
                                             ex1
                                 content_class
            ▼ bg1
              ▼ estatuto_global
                 ▼ vars
                     var
                   ▼ vars2
                        aux
                     ▼ vars3
                        ▼ tipo
                             int
              ▼ bg1
                 ▼ estatuto_global
                   ▼ asignacion
                        aux
                     ▼ expresion
                        ▼ exp
                          ▼ termino
                             ▼ factor
                               ▼ factor2
                                   factor3
                                   var_cte
                               t1
                            ex1
                        ▼ expresion1
                            expresion2
                          ▼ exp
                             ▼ termino
                               ▼ factor
                                 ▼ factor2
                                      factor3
                                    ▼ var_cte
                                         4
                                 t1
                               ex1
                ▼ bg1
                   ▼ estatuto_global
                     ▼ ciclo
                          while
                        ▼ expresion
                          ▼ exp
                             ▼ termino
                               ▼ factor
                                  ▼ factor2
                                      factor3
                                    ▼ var_cte
                                         aux
                                 t1
                               ex1
                          ▼ expresion1
                             ▼ expresion2
                                 >
                             ▼ exp
                               ▼ termino
                                  ▼ factor
                                    ▼ factor2
                                        factor3
                                      ▼ var_cte
                                           0
                                   t1
                                 ex1
                        ▼ bloque
                          ▼ b1
                             ▼ estatuto
                               ▼ escritura
                                    print
                                  ▼ esc1
                                       "hola mundo"
                                   esc2
                             ▼ b1
                               ▼ estatuto
                                  ▼ escritura
                                       print
                                    ▼ esc1
                                         "\n"
                                      esc2
                               ▼ b1
                                  ▼ estatuto
                                    ▼ asignacion
                                         aux
                                         =
                                       ▼ expresion
                                         ▼ exp
                                           ▼ termino
                                              ▼ factor
                                                ▼ factor2
                                                     factor3
                                                   ▼ var_cte
                                                        aux
                                                t1
                                           ▼ ex1
                                              ▼ ex2
                                              ▼ exp
                                                ▼ termino
                                                   ▼ factor
                                                     ▼ factor2
                                                         factor3
                                                       ▼ var_cte
                                                     t1
                                                  ex1
                                         ▼ expresion1
                                             expresion2
                                           ▼ exp
                                              ▼ termino
                                                ▼ factor
                                                   ▼ factor2
                                                       factor3
                                                       var_cte
                                                  t1
                                                ex1
```

b1

bg1

Finish