```
RECORD record -
ID #po110
curly_brace_left {
INT int -
ID #xx111
comma , -
ID #yy112
semicolon ; -
curly_brace_right }
RECORD record -
ID
     #li113
curly_brace_left {
ID #po114
ID #xx115
comma, -
ID #yy116
semicolon ;
curly_brace_right
            }
INT int -
ID #at117
parenthesis_left (
INT
    int -
     #ba128
ID
comma , -
     #ca239
ID
square_bracket_left [
square_bracket_right ]
semicolon ; -
```

BOOL bool -

```
#do4310
ID
comma, -
ID
     #el3211
semicolon;
INT
     int -
     #fo1212
ID
parenthesis_right
             )
curly_brace_left {
     int -
INT
ID
     #gn1113
comma , -
ID
     #ho1214
square_bracket_left [
NUMCONST 100 -
square_bracket_right ]
semicolon ; -
ID
     #po1115
     #aP1116
ID
semicolon ; -
ID
     #li1117
ID
     #aL1118
semicolon ; -
     #li1119
ID
ID
     #tw3320
square_bracket_left [
NUMCONST 2
square_bracket_right ]
semicolon ; -
ID
     #aP1121
```

dot . -

ID #xx1122

assignment = -

NUMCONST 666 -

semicolon ; -

ID #aP1123

dot . -

ID #yy1124

assignment = -

NUMCONST 667 -

semicolon ; -

ID #aL1125

dot . -

ID #xx1126

dot . -

ID #xx1127

assignment = -

NUMCONST 1 -

semicolon ; -

ID #aL1128

dot . -

ID #xx1129

dot . -

ID #yy1130

assignment = -

NUMCONST 2 -

semicolon ; -

ID #aL1131

dot . -

```
ID #yy1132
dot . -
ID
    #xx1133
assignment =
NUMCONST 3
semicolon ;
ID
    #aL1134
dot . -
ID #yy1135
dot . -
ID #yy1136
assignment =
NUMCONST 4
semicolon ;
ID #tw3337
square_bracket_left [
NUMCONST 0 -
square_bracket_right ]
dot . -
ID #xx1138
dot . -
ID
    #xx1139
assignment =
NUMCONST 42
semicolon ; -
    #tw3340
ID
square_bracket_left [
NUMCONST 1 -
```

square\_bracket\_right ]

```
dot
ID
      #yy1141
dot . -
ID
      #xx1142
assignment
NUMCONST
            43
semicolon
      #gn1143
ID
assignment
ID
      #ho1244
square_bracket_left
                   [
NUMCONST 2
square_bracket_right ]
assignment
NUMCONST
multiply
multiply
ID
      #ca2345
semicolon
          // hog is 3 times the size of array passed to cat -
comment
IF
      if
parenthesis_left
                   (
      #do4346
ID
AND
      and -
      #el3247
ID
OR
      or
ID
      #ba1248
greater_than .gt
      #ca2349
ID
```

```
square_bracket_left
                     [
NUMCONST 3
square_bracket_right ]
parenthesis_right
                     )
       #do4350
ID
assignment
NOT
       not
       #do4351
ID
semicolon
ELSE
       else
ID
       #fo1252
plus
plus
semicolon
IF
       if
parenthesis\_left
ID
       #ba1253
less_equal
              .le
       #fo1254
ID
parenthesis_right
curly_brace_left
                     {
WHILE while -
parenthesis_left
                     (
ID
       #do4355
parenthesis_right
                     )
curly_brace_left
                     {
Static static -
INT
       int
       #ho1256
ID
```

```
semicolon ; -
comment // hog in new scope
ID
     #ho1257
assignment =
ID
     #fo1258
semicolon;
     #do4359
ID
assignment =
     #fr7760
ID
parenthesis_left
ID
     #fo1261
plus +
plus
comma ,
     #ca2362
ID
parenthesis_right
less_than .lt
NUMCONST 666
semicolon
IF
     if -
parenthesis_left
                  (
ID
     #ho1263
greater_than .gt
ID
     #ba1264
parenthesis_right
               )
BREAK break -
semicolon;
ELSE
     else
IF
      if
```

```
parenthesis_left
ID
      #fo1265
not_equal
             .ne
NUMCONST
             0
parenthesis_right
      #fo1266
ID
plus_assign
NUMCONST
             7
semicolon
curly_brace_right
curly_brace_right
                    }
RETURN
             return -
parenthesis_left
ID
      #fo1267
plus
ID
      #ba1268
multiply
ID
      #ca2369
square_bracket_left
                    [
      #ba1270
ID
square_bracket_right ]
parenthesis_right
                    )
division / -
minus - -
      #fo1271
ID
semicolon
curly_brace_right
                    }
REAL real -
      #qo6472
ID
```

```
parenthesis_left
                (
INT
      int -
ID
      #jh7673
parenthesis_right
                  )
curly_brace_left
                 {
REAL real -
ID
      #rt6274
assignment
Real_const 0.0
semicolon
REAL real -
ID
      #we1275
assignment =
Real_const 1.62
semicolon
RETURN
        return -
ID
      #we1276
semicolon
curly_brace_right
               }
comment // note that functions are defined using a statement
INT
      int
      #ma1177
ID
parenthesis_left
                (
INT
      int -
ID
      #aa1178
comma, -
ID
      #bb1179
parenthesis_right
               )
ΙF
      if -
```

parenthesis\_left ( ID #aa1180

illegal character
ID #bb1181

parenthesis\_right ) RETURN return ID #aa1182

semicolon ; ELSE else RETURN return ID #bb1183

semicolon ; -