

# 1 Gramàtica

Els símbols terminals o tokens estan marcats en **negreta**.

```
program → declList
declList → declList decl
           | decl
declList → varDecl
           | funcDecl
           | procDecl
varDecl → const type varDeclList varInit ;
varDeclList → ID
              | varDeclList , ID
varInit → = exprSimple
          |  $\lambda$ 
const → const
        |  $\lambda$ 
funcDecl → func ID ( args ) : type begin bloc end ID ;
procDecl → proc ID ( args ) begin bloc end ID ;
args → argList
        |  $\lambda$ 
argList → type id argListCont
argListCont → , argList
              |  $\lambda$ 
bloc → statement ; bloc
        |  $\lambda$ 
statement → varDecl
            | iterationStatement
            | conditionalStatement
            | returnStatement
            | break
iterationStatement → forIteration
                    | whileIteration
forIteration → for ( forInit ; exprSimple ; forPostExpression ) do bloc end ;
forInit → expression
          |  $\lambda$ 
forPostExprpession → expression
                    |  $\lambda$ 
```

$whileIteration \rightarrow \mathbf{while} \ ( \ exprSimple \ ) \ \mathbf{do} \ bloc \ \mathbf{end}$   
 $condStatement \rightarrow ifStatement$   
 $\quad \quad \quad | \ switchStatement$   
 $\quad \quad \quad ifStatement \rightarrow \mathbf{if} \ exprSimple \ \mathbf{do} \ bloc \ elseIfStatement \ \mathbf{end}$   
 $elseIfStatement \rightarrow \mathbf{else} \ \mathbf{if} \ exprSimple \ \mathbf{do} \ bloc \ elseIfStatement$   
 $\quad \quad \quad | \ elseStatement$   
 $elseStatement \rightarrow \mathbf{else} \ \mathbf{do} \ bloc$   
 $\quad \quad \quad \rightarrow \lambda$   
 $switchStatement \rightarrow \mathbf{switch} \ ( \ exprSimple \ ) \ \mathbf{begin} \ caseBloc \ \mathbf{end}$   
 $\quad \quad \quad caseBloc \rightarrow \mathbf{case} \ literal? \ \mathbf{do} \ bloc \ \mathbf{end} \ caseBloc$   
 $\quad \quad \quad | \ \mathbf{default} \ \mathbf{do} \ bloc \ \mathbf{end}$   
 $\quad \quad \quad | \ \lambda$