

MicroJava – Grammatik

Program	= "program" ident { ConstDecl VarDecl ClassDecl } "{" { MethodDecl } "}".
ConstDecl	= "final" Type ident "=" (number charConst) ";".
VarDecl	= Type ident { "," ident } ";".
ClassDecl	= "class" ident "{" { VarDecl } "}".
MethodDecl	= (Type "void") ident "(" [FormPars] ")" { VarDecl } Block.
FormPars	= Type ident { "," Type ident }.
Type	= ident ["[" "]"].
Block	= "{" { Statement } "}".
Statement	= Designator (Assignop Expr ActPars "++" "--") ";" "if" "(" Condition ")" Statement ["else" Statement] "while" "(" Condition ")" Statement "break" ";" "return" [Expr] ";" "read" "(" Designator ")" ";" "print" "(" Expr ["," number] ")" ";" Block ";".
Assignop	= "=" "+=" "-=" "*=" "/=" "%=".
ActPars	= "(" [Expr { "," Expr }] ")".
Condition	= CondTerm { " " CondTerm }.
CondTerm	= CondFact { "&&" CondFact }.
CondFact	= Expr Relop Expr.
Relop	= "==" "!=" ">" ">=" "<" "<=".
Expr	= ["-"] Term { Addop Term }.
Term	= Factor { Mulop Factor }.
Factor	= Designator [ActPars] number charConst "new" ident ["[" Expr "]"] "(" Expr ")".
Designator	= ident { "." ident "[" Expr "]" }.
Addop	= "+" "-".
Mulop	= "*" "/" "%" "**" "√".