Context Free Grammar for Tiny Programming Language

**1: Program→ Program Function | MainFunction**

**1.1: Program→ MainFunction Program′**

**1.1: Program′→ Function Program′ | ε**

**2: Function→ FunctionDecl FunctionBody**

**3: FunctionDecl→ Decl1Var “(“ ParametersDecl “)“**

**4: DataType→ int | float | string  
5: Decl1Var→ DataType identifier**

**6: ParametersDecl→** **Parameters | ε**

**7: Parameters→ Parameters “,” Decl1Var |Decl1Var**

**7.1: Parameters→ Decl1Var Parameters′**

**7.2: Parameters′→ “,” Decl1Var Parameters′ | ε**

**8: FunctionBody → “{“ ManyStatements ReturnStatement “}“**

**9: ManyStatements→ Statement ManyStatements | ε**

**10: StatmentsForIf→ Statement StatmentsForIf | Statement**

**10.1: StatmentsForIf→ Statement StatmentsForIf′**

**10.2: StatmentsForIf′→ Statement StatmentsForIf′ | ε**

**10: Statement → IfStatement | ConditionStatement | WriteStatement | ReadStatement   
| ReturnStatement | AssignmentStatement | FunctionCall  
| RepeatStatement | DeclarationStatement**

**11: IfStatement→ if ConditionStatement then StatmentsForIf Ifff**

**12: Ifff → ElseIf | Else | end**