

Proyecto

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June 5, 2025

Contents

```
Program ::= VarDecList ClassDecList FunDecList
VarDecList ::= (VarDec)*
ClassDecList ::= (ClassDec)*
FunDecList ::= (FunDec)+
FunDec ::= fun id([ParamDecList]) : Type { Body }
Body ::= VarDecList StmtList
ParamDecList ::= id : Type (, id: Type)*
VarDec ::= [val | var] id : Type [ = CExp];
ListDec ::= [val | var] id : [MutableList | List]<Type> [ = ListExp];
ListExp ::= [listOf | mutableListOf] ( (CExp)* )
ClassDec ::= class id(Arguments) { VarDecList FunDecList }
Arguments ::= val id : Type (, val id: Type)*
ListDec ::= [val | var] : Type id [ = CExp];
Type ::= id
VarList ::= id (,id)*
StmtList ::= Stmt ( ; Stmt )*
Stmt ::= id = CExp |
[println | print] ( CExp ) |
if CExp { Body } [else { Body }]* |
while ( CExp ) { Body } |
do { Body } while ( CExp ) |
for (id in [[CExp [.< | downTo] CExp] | ListExp] ) { Body } |
return ( [CExp] ) |
when [*( CExp )]* *{ (CExp -> Stmt)* else -> Stmt } |
CExp ::= Exp [(<|<=|==) Exp]
Exp ::= Term ((+ | -) Term)*
Term ::= Factor ((|/) Factor)
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```

Factor ::= id | Num | Bool | ( Exp ) |
if ( CExp ) CExp else CExp ) | id ( [ArgList] ) |
when [*( CExp )*] *{ (CExp -> CExp)* else -> CExp } |
ListExp[CExp]
ArgList ::= CExp (, CExp)*
Bool ::= true | false

```