

GLC da Linguagem de Programação R

Terminais são representados pelos elementos cuja grafia está em maiúsculo, bem como pelos símbolos que estão entre aspas duplas (")

```
program → funcdecl |  
        funcdecl program
```

```
funcdecl → signature body
```

```
signature → ID ID "" "(" sigParams ")"
```

```
sigparams → ID ID |  
            ID ID "," sigparams
```

```
body → "{" stms "}"
```

```
stms → stm |  
      stm stms
```

```
stm → exp ";" |  
      WHILE "(" exp ")" body |  
      return exp ";" |  
      IF "(" exp ")" body ELSE body |  
      FOR "(" ID "in" exp ")" body |  
      REPEAT body UNTIL "(" exp ")" ";" |  
      break ";" |  
      next ";"
```

```
stm → SWITCH "(" exp "," cases ")"  
cases → "(" exp ")" "=" "{" stms "}"  
       | "(" exp ")" "=" "{" stms "}" "(" cases ")"  
       | "(" exp ")" "=" "{" stms "}"  
       | "(" exp ")" "=" "{" stm "}" "(" cases ")"
```

```
call → ID "(" params ")"
```

```
exp → exp "+" exp |  
      exp "-" exp |  
      exp "*" exp |  
      exp "/" exp |  
      exp "^" exp |  
      call |  
      assign |  
      NUM |  
      ID
```

```
call → ID "(" params ")" |  
       ID "(" ")"
```

```
params → exp "," params |  
        exp
```

assign \rightarrow ID "=" exp