

# Gramática com Expressões Regulares LL(1) da Linguagem L

**S** → {**Declarar**}\* {**Comando**}\*

**Declarar** → “final” “id” “<-” [“-”] const “;” | (int | boolean | byte | string) id  
**ListaIds**“;”

**ListaIds** → [**Atrib**] {“,” “id” [**Atrib**]}\*

**Atrib** → “<-” [“-”] const

**Comando** → **Atribuicao** | **Repeticao** | **Teste** | **Nulo** | **Leitura** | **Escrita**

**Atribuicao** → “id” “<-” **Expressao** “;”

**Repeticao** → “while” (“**Expressao**”) **Blocowhile**

**Blocowhile** → “begin” {**Comando**}\* “endwhile” | **Comando**

**Teste** → “if” (“**Expressao**”) (**Blocoif** | **Comando** [**BlocoElse**])

**Blocoif** → “begin” {**Comando**}+ “endif” “else” “begin” {**Comando**}+ “endelse”

**BlocoElse** → “else” **Comando**

**Nulo** → “;”

**Leitura** → “readln” (“id”) “;”

**Escrita** → “write” (“**ListaExpressoes**”) “;” | “writeln” (“**ListaExpressoes**”) “;”

**ListaExpressoes** → **Expressao** {“,” **Expressao**}\*

**Expressao** → **Exp** [(“=” | “!=” | “<” | “>” | “<=” | “>=”) **Exp**]

**Exp** → [+ | - ] **T** {(“+” | “-” | “||”) **T**}\*

**T** → **F** {(“\*” | “&&” | “/”) **F**}\*

**F** → “!” **F** | (“**Expressao**”) | [“-”] const | id

