Bix EBNF Definition

Notation:
- Square brackets [ ] delimit optional constructs;
- braces { } indicate zero or more repetitions of the enclosed construct;
- parentheses ( ) indicate simple grouping of constructs;
- a vertical bar | indicates choice of one from many;
- literal text in definitions is denoted using bold font or a pair of quotation marks " " .

Functions
main-function-definition:
fn Principal()
function-definition:
fn alphanumeric-text**(**[variable]**) {** statement **}.**

Variables
variable =
var alphanumeric-text.

Conditionals
conditional-statement =
if-statement [{or-if-statement}] [or-else-statement].

Loops
loop-statement =
repeat-statement.

Statements
statement =
simple-statement | loop-statement | conditional-statement | operation-statement.

simple-statement =
variable any-sign (number | variable).

repeat-statement =
enquanto (simple-statement)**{** statement **}**

if-statement =
se (simple-statement**) {** statement **}**

else-statement =
então { statement **}**

print-statement =
Imprimir(statement **)**

Variable and Identifier Categories
alphanumeric-text =

letter | digit [{letter | digit}].

number =
      {digit}.

Low Level Definitions
any-sign =
      sign | operation-sign | attribution-sign | comparison-sign.

sign =
      "+" | "-".

operation-sign =
      sign | "*" | "%".

attribution-sign =
      "=".

comparison-sign =
      "==" | ">" | "<".

letter =
      "A" | "B" | "C" | "D" | "E" | "F" | "G" | "H" | "I" | "J" | "K" | "L" | "M" | "N" | "O" | "P" | "Q" |
      "R" | "S" | "T" | "U" | "V" | "W" | "X" | "Y" | "Z" | "a" | "b" | "c" | "d" | "e" | "f" | "g" | "h" | "i"
      | "j" | "k" | "l" | "m" | "n" | "o" | "p" | "q" | "r" | "s" | "t" | "u" | "v" | "w" | "x" | "y" | "z" .
digit =
      "0" | "1" | "2" | "3" | "4" | "5" | "6" | "7" | "8" | "9" .