

Mini-language specification

Alphabet:

- a. Upper (A-Z) and lowercase letters (a-z) of the English alphabet
- b. Underline character ‘_’;
- c. Decimal digits (0-9);

Lexic:

a. Special symbols, representing:

- operators + - * / < <= = >= > ?: == % !=

- separators @ [] {} # "" ' ; ()

- reserved words:

func, Int, String, Bool, Char, if, elif, else, let, var, ret, True, False,

read, print, loop, GO, STOP

b. identifiers

- a sequence of letters and digits, such that the first character is a letter; the rule is:

identifier ::= letter{letter|digit}

letter ::= "a" | "b" | ... | "z" | "A" | "B" | ... | "Z"

digit ::= "0" | "1" | ... | "9"

nzdigit = "1" | ... | "9"

c. constants

1. integer - rule:

int = "0" | ["+" | "-"]nzdigit{digit}

2. character

char:='letter'|'digit'|'special_char'

special_char := "." | " " | "," | ":" | ";"

3.string

constchar:="string"

string:=char{string}

char := letter|digit|special_char

4. bool

bool := "True" | "False"