

Alphabet:

- a. Upper (A-Z) and lower case letters (a-z) of the English alphabet**
- b. Underline character '_';**
- c. Hyphen character '-';**
- d. Decimal digits (0-9);**

Lexic:

a. Special symbols, representing:

- operators + - * / ^ > lt eq geq leq <- and or not**
- separators [] { } () : ; , " " ' ' space tab newline**
- reserved words: start end number read print if fi else string for rof list char root while elihw**

b. Identifiers

- a sequence of letters, digits underline or hyphen, such that the first character is a letter; the rule is:**

identifier = letter|letter{letter}{hyphen|underline}{digit}{letter}{hyphen|underline}{letter}

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

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

hyphen = "-"

underline = "_"

c. Constants

1. integer - rule:

integer = ["+" | "-"] non_null_digit {digit} | "0"

non_null_digit = "0" | "1" | ... | "9"

digit = "0" | non_null_digit

2. character

character = 'letter' | 'digit'

3. string

constchar = "string"

string = char{string}

char = letter | digit