

Lapine Programming Language

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Introduction :

Lapine is a fictional language created by author Richard Adams for his 1972 novel Watership Down, where it is spoken by rabbit characters. The motivation of working on lapine programming language is to make a unique programming language that can attract students to learn.

Language Scope :

The Language can be used in any Programming Aspects we can use as it C++ Compiler we define as our own Keywords.

Lexical Aspects :

- An identifier is a sequence of letters, digits, and underscores that starts with a lower case alphabet.

`[a-zA-Z]+[_a-zA-Z0-9]*['a-z'|'A-Z']`

- An integer is a sequence of digits. `[0-9]`
- A String Constant anything surrounded with double quotes. `"[{ } | ; | (|)]"`
- An operator consists of all arithmetic and logical operators with an addition Subtraction Operator `[+|-|*|/|=|<|>|<=|>|=|!=]`
- The escape sequence of language along with String can be used as

`\"(\\.[^\"\\])*\"`

- The comments can be begin with `/*` and ends with `*/`

`/*\"(.\\n)*\"*/`

- The Keywords Define for the language Lapine:

`“Lapine”|“hay”|“dayn”|“thrang”|“blang”|“lapine”|“os”|“el-os”|“el”|“fix”|“stop”|“goOn”|
“goBack”|“alpha”|“beta”`

Keywords of Language :

Lapine Language	Works as
hay	Print
dayn	Input
thrang/hlang	True/False
lapine	Loop
os/el-os	Condition (if/else if)
el	else
fix	constant
stop/goOn	break/continue
goBack	return
alpha	int
beta	char