

GitHub Repository: <https://github.com/edwardinio18/LFTC>

L1b
lexic.txt
Alphabet
a-z
A-Z
0-9
_
€

Lexic
operators: adunate, stergete, oriori, orioriinvers, estiegal, verificaegal, verificanuegal, maimare, maimic, maimareegal, maimicegal, lasuta
separators: spatiu, sarilinia, gatalinia, :, .., (comma), ', ", (,), {, }, [,], _
reserved words: cvnou, daca, altfel, cattimp, fa, pentrufiecare, oprestete, continua, scrie, citeste, in, prog, de

```
identifier = ("€")(letter | digit)
letter = "A" | "B" | ... | "Z" | "a" | "b".. | "z"
digit = "0" | "1" | ... | "9"
```

```
intconst = "0" | ["poz" | "neg"]nz_digit{digit}
nz_digit = "1" | "2" | ... | "9"
strconst = ""{letter | digit | "_" | " " }""
charconst = ""(letter | digit)""
```

syntax.in
Sintactical rules: (file Syntax.in)

```
program ::= "cvnou" decllist ";" cmpdstmt ";"

decllist ::= declaration | declaration ";" decllist

declaration ::= IDENTIFIER ":" type ";"

type1 ::= "advfals" | "caracter" | "integ" | "real"

arraydecl ::= "sir" "(" nr ")" "de" type1

type ::= type1 | arraydecl

cmpdstmt ::= "incepe" stmtlist "termina"

stmtlist ::= stmt | stmt ";" stmtlist

stmt ::= simplstmt | structstmt

simplstmt ::= assignstmt | iostmt

forstmt ::= "pentru" "(" assignstmt ";" condition ";" assignstmt ")" "fa" "{" stmt "}"

foreachstmt ::= "pentrufiecare" "(" IDENTIFIER "in" IDENTIFIER ")" "fa" "{" stmt "}"

assignstmt ::= IDENTIFIER "=" expression

expression ::= expression "adunate" term | term

term ::= term "oriori" factor | factor

factor ::= "(" expression ")" | IDENTIFIER

iostmt ::= "citeste" | "scrie" "(" IDENTIFIER ")"

structstmt ::= cmpdstmt | ifstmt | whilestmt

ifstmt ::= "daca" "(" condition ")" "atunci" "{" stmt "}" ["altfel" "{" stmt "}"]

whilestmt ::= "cattimp" "(" condition ")" "fa" "{" stmt "}"

condition ::= expression RELATION expression

RELATION ::= "maimic" | "maimicegal" | "verificaegal" | "nu" | "maimareegal" | "maimare"
```

token.in
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
0
1
2
3
4
5
6
7
8
9
adunate
stergete
oriori
orioriinvers
estiegal
verificaegal
verificanuegal
maimare
maimic
maimareegal
maimicegal
lasuta
spatiu
sarilinia
gatalinia
:
.
;
:
"
(
)
[
]
{
}
sisi
sausau
!
cvnou
daca
altfel
cattimp
fa
pentruafecare
oprestete
continua
scrie
citeste
atunci
incepe
termina
intreg
real
sfoara
advfals
character
sir
functie
constanta
intoarce
€
_
de
prog
in