

## Lab8 – LEX/FLEX

Github: <https://github.com/ecaterinacatargiu/courses/tree/main/FLCD/Lab8>

At this lab I used the following “schema”:

definitions

%%

rules

%%

user code

I used the following commands to make it work:

```
lex lab8.lxi
gcc lex.yy.c -o main
./main p1.cati
```

Furthermore, I had to treat some error and I chose the ‘Expected end of string’.

Bellow you can see a short demo for a correctly written program and one with errors:

1. Correct one

```
intreg n
intreg suma
intreg i
suma este 0
i este 0
pt [ i / i < n / i## ]
      suma := suma aduna suma
dainapoi suma
```

With the following result:

```

cati98@DESKTOP-PRM8G3D:~/FLCD/Lab8lex$ lex lab8.lxi
cati98@DESKTOP-PRM8G3D:~/FLCD/Lab8lex$ gcc lex.yy.c -o main
cati98@DESKTOP-PRM8G3D:~/FLCD/Lab8lex$ ./main p2.cati
A reserved word: intreg
An identifier at line: n
A reserved word: intreg
An identifier at line: suma
A reserved word: intreg
An identifier at line: i
An identifier at line: suma
An operator: este
Constant at line 3
An identifier at line: i
An operator: este
Constant at line 4
A reserved word: pt
A separator: [
An identifier at line: i
A separator: /
An identifier at line: i
An operator: <
An identifier at line: n
A separator: /
An identifier at line: i
An operator: ##
A separator: ]
An identifier at line: suma
An operator: :=
An identifier at line: suma
A reserved word: aduna
An identifier at line: suma
A reserved word: dainapoi
An identifier at line: suma

```

2. The one with issues:

```

intreg n
intreg 'suma
intreg i
suma este
i este 0
pt [ i / i < n / i## ]
    suma := suma aduna suma
dainapoi suma

```

With the result:

```
A reserved word: intreg
An identifier at line: n
A reserved word: intreg
Expected end of string on line 1
An identifier at line: uma
A reserved word: intreg
An identifier at line: i
An identifier at line: suma
An operator: este
An identifier at line: i
An operator: este
Constant at line 4
A reserved word: pt
A separator: [
An identifier at line: i
A separator: /
An identifier at line: i
An operator: <
An identifier at line: n
A separator: /
An identifier at line: i
An operator: ##
A separator: ]
An identifier at line: suma
An operator: :=
An identifier at line: suma
A reserved word: aduna
An identifier at line: suma
A reserved word: dainapoi
An identifier at line: suma
L1000561000 00000000 (51.60.4.1.01) 4
```