



TP4 :Automata

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1 Presentation

One of the most popular command of linux is *GREP*. *GREP* comes from :g/re/p and the editor *ed* grandfather of the actual editor vim, the object of the work that is asked to us is to recreate a simple *GREP*. for this we will need to create a simple Automata generator by using the an already done struct that was gave to us. The final program inventivly named mygrep is complete, in the sens that the optional task has been done. Moreover the program possessed a verbose options for a more easier correction.

ex :

```
$blüht@ /tp-Automata ./mygrep -v '(a+b).(a+c).b*' 'acbbbbbb'
```

```
init : 0
finals : 10
0 -- & --> 1,3
1 -- a --> 2
2 -- & --> 5
3 -- b --> 4
4 -- & --> 5
5 -- & --> 6,8
6 -- a --> 7
```

```

7 -- & --> 10
8 -- c --> 9
9 -- & --> 10
10 -- & --> 11
11 -- b --> 12
12 -- & --> 10

```

accepté

2 Structure of the directory

The directory is composed by 15 files and 1 directory, the directory named test is himself composed of 5 *test pour faciliter la vie du correcteur*.



3 Remarks



The grammar might be strange at first glance but it has been conceived with an evaluation from right to left in mind, this solution is purely an implementation choice and doesn't change anything about the final result.

4 Test

As we said before there is in the makefile 5 test to try our code, they can be invoked with :

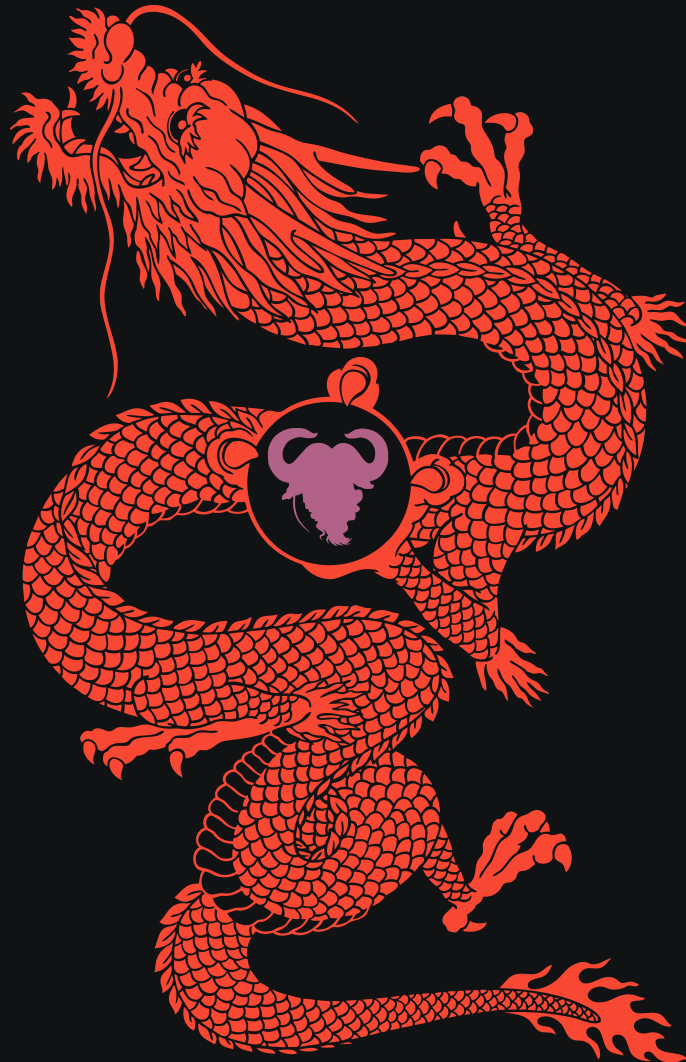
Make ex1

Make concat

Make union

Make kleen

Make grep



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