

CS112 (LFA): Lab 1

February 23, 2023

Exercise 1. *Implement a library/program in a programming language of your choosing to load and validate the following input file:*

```
#
# comment lines (skip them)
#
Sigma:
    letter1
    letter2
    ...
End
#
# comment lines (skip them)
#
States:
    state1
    state2
    state3 , F
    ...
    stateK , S
    ...
End
#
# comment lines (skip them)
#
Transitions:
    stateX , letterY , stateZ
    stateX , letterY , stateZ
    ...
End
```

Sections can be in any order. By validation we ask to check that transition section has valid states (first and third word) and valid letters (word two). Note that states can be succeeded by "F", "S", both or nothing. "S" symbol can succeed only one state.

Exercise 2. *Familiarize yourself with Python Notebooks if python is the language of choice.*

Exercise 3. *Familiarize yourself with Latex (overleaf.com).*