

## Project. Part I

### Deterministic Finite Automaton (AFD)

---

Write a program that reads from a file the elements that define a AFD and indicate if the input string is accepted by the automaton.

The file is defined as follows:

- The first row indicates the set of states separated by commas.
- The second row indicates the alphabet symbols separated by commas.
- The third row indicates the initial state.
- The next rows after the third one indicate the evaluation of the transition function in the following format:

initialSymbol, nextSymbol: state

Example:

q0,a:q0

Indicates that the automaton process:  $\delta(q0,a) = \{q0\}$

**The final output of the program has to print out the resulting transitions and if the string was accepted or not.**

Note: Assume that the values of the input file are correct and they do not need to be validated

Deliverables rules:

- Accepted programming languages: JAVA, Python, C y C++.
- Put everything into a compressed zip file: xxxxyproyecto\_1.zip, where xxxxx is your matrícula.
- 

Deliverables:

- Source code
- PDF file with the name of the team members and a detailed explanation of the program and usage instructions.

Maximum team members: 2