https://github.com/lucaciobanu/FLCD/tree/main/Lab%204

Finite Automata

For the Finite Automata the following are used:

* Lists for storing the states, alphabet, initial state (q0), final states
* Dictionary for transitions (i.e. (A, 0) -> B) key will be the pair (A, 0) and the value will be the list of destinations

Functions used:

readFromFile

in – file name (FA.txt)

out – returns an FA object with added states, alphabet, q0, final states and transitions

checkDFA

out – True, if DFA or False, if not DFA

The function checks in the dictionary of transitions if a key (pair) has multiple destinations.

menu

Funtion that implements the menu so that the user can choose what to do (“Show states” etc.)

checkSequence

in – sequence : String

out – True, if sequence is accepted

The FA.txt :

