

<https://github.com/915-Pavel-Dragos/FLCD/tree/master/Lab4>

To represent the FA I used a list for the set of states(Q), for the alphabet(Sigma), for the initial state(q0) and for the set

of final states.

For the set of transitions I used a dictionary, in which the key is a tuple formed by the start state and the value of that state from

the alphabet and the final state of the transition.

$\langle \text{Transition} \rangle ::= "(" \langle \text{State} \rangle "," \langle \text{Symbol} \rangle ")" \rightarrow \langle \text{State} \rangle$

$\langle \text{TransitionRules} \rangle ::= \langle \text{Transition} \rangle \mid \langle \text{Transition} \rangle \langle \text{TransitionRules} \rangle$

$\langle \text{State} \rangle ::= "a" \mid "b" \mid "c"$

$\langle \text{StateList} \rangle ::= \langle \text{State} \rangle \mid \langle \text{State} \rangle \langle \text{StateList} \rangle$

$\langle \text{Symbol} \rangle ::= "1" \mid "2"$

$\langle \text{SymbolList} \rangle ::= \langle \text{Symbol} \rangle \mid \langle \text{Symbol} \rangle \langle \text{SymbolList} \rangle$

$\langle \text{Automaton} \rangle ::= "Q = \{ " \langle \text{StateList} \rangle " \}$

$"\Sigma = \{ " \langle \text{SymbolList} \rangle " \}$

$"q_0 = " \langle \text{State} \rangle$

$"F = \{ " \langle \text{StateList} \rangle " \}$

$"\Gamma = \{ " \langle \text{TransitionRules} \rangle " \}$