

Github: <https://github.com/pukoarmin/Formal-Languages-and-Compiler-Design.git>

Finite Automata - Documentation:

Language used: Python

=== FiniteAutomata ===

Q: List<String> => Contains the set of states

E: List<String> => Contains the alphabet

S: List<Pair<Pair<String, String>, String>> => Contains the set of states

q0: String => Represents the first state

F: List<String> => Contains the set of final states

is_state(String): Boolean => Returns True if the parameter is a state, False otherwise

show_states(): Void => Prints the states

show_final_states(): Void => Prints the final states

show_alphabet(): Void => Shows the alphabet

get_transitions_for(String): returns the set of transitions for the parameter

show_transition_for(String): Shows the set of transitions for the parameter

is_DFA(): Boolean => Returns true if the FA is DFA, False otherwise

isAccepted(String): Boolean => Returns True if the FA is DFA and the parameter is an accepted sequence, False otherwise

BNF:

q0 ::= q1

q1 ::= q1 | q3

q2 ::= q2 | q1

q3 ::= q3 | q2