

Assignment 7

Finite state machines testing

Each of you have a different automaton for this assignment. You will find them in the attached archive. This assignment is worth 3 points if you use the attached Python script, or it's worth 7 points if you make it from the scratch.

1. Visualize your automaton.
2. Compute the characteristic set - \mathcal{W} - of your automaton and sort it in a lexicographic way. i.e.: 1. e01, 2. e98, 3. e01-e01, ...
3. For every node create a list of possible outputs if the automaton is given as an input a sequence from \mathcal{W} .
4. Create a table that will contain - for every pair of nodes - a lowest index of a sequence from \mathcal{W} , that discerns between them.
5. Write a brief report containing all of the above.

Notation remark: outputs start with 'o', inputs start with 'e' and nodes start with 's'.