

Finite Automata

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[Link to git repo](#)

Implementation:

- Works based on the principle of a FA: based on an initial given state, final states, alphabet and a set of transitions, checks that a given string of characters can be formed using the given rules

Operations:

- most operations are the printing ones, each printing either the initial state, final states, alphabet or the transitions
- `checkAccepted(List<String> word)`
 - starting from the initial state, for each of the characters in the given word, parses the list of transitions trying to find one that matches (the first state has to match current state, the characters have to match as well and resulting state can only be a final one in case it has reached the last character of the input string as well);
 - if at any point it cannot match any transition (invalid order or characters, for example, in a FA specialized for string identifiers, it cannot start with a digit, or contains characters that are not part of the alphabet) it returns false, otherwise true