Challenge 2 – Deterministic Finite Automata (DFAs)

We may have different DFAs recognizing the same language and in practice it might be important to verify if two or more FAs represent the same language.

Consider that we want to prove that two given DFAs are equivalent (i.e., represent the same language). Describe a method that can be applied to verify the equivalence of two DFAs. If helpful, explain the method using examples.

Note: do not use minimization of the DFA states (a technique known as DFA minimization) and/or the table of equivalent (or distinguishable) states (techniques to be presented later on during the TCOM course).