

CPSC 351 — Tutorial Exercise #6

Equivalence of Deterministic Finite Automata and Nondeterministic Finite Automata

1 About This Exercise

This exercise is intended to help you to understand the relationship between nondeterministic finite automata and deterministic finite automata, and the process for the conversion of a nondeterministic finite automaton to a deterministic finite automaton with the same language included in the lecture notes.

Problems To Be Solved

1. Design a deterministic finite automaton for the language $L(M)$ of the following nondeterministic finite automaton — which has alphabet $\Sigma = \{a, b\}$ — and (if possible) confirm that your answer is correct.

