

CPSC 351 — Tutorial Exercise #5

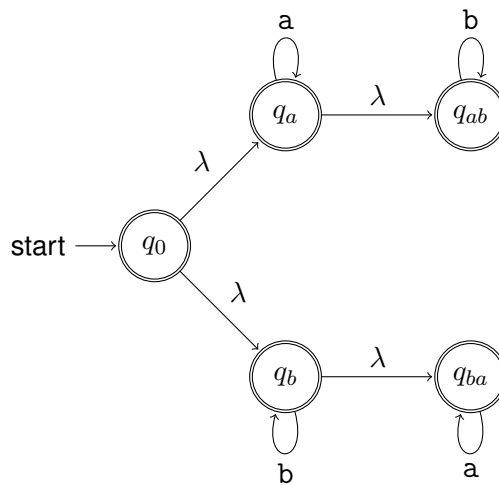
Equivalence of Deterministic Finite Automata and Nondeterministic Finite Automata

About This Exercise

The goal of this exercise is to help you to understand how a given nondeterministic finite automaton can be used to produce a deterministic finite automaton with the same language.

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.



Note: This is the same as the nondeterministic finite automaton that was considered in the previous tutorial exercise.