

Class Exercise, 1/28/2020

Construct DFA (deterministic finite automaton) for the language accepted by the following NFA (nondeterministic finite automaton), defined as $(Q, \Sigma, \delta, q_0, F)$ where

1. $Q = \{q_0, q_1, q_2, q_3\}$
2. $\Sigma = \{a, b\}$
3. q_0 is the start state
4. $F = \{q_0, q_3\}$

5. δ is given by

	a	b	ε
q_0	$\{q_0\}$	$\{q_2\}$	$\{q_1\}$
q_1	$\{q_3\}$	$\{q_2\}$	$\emptyset$
q_2	$\emptyset$	$\{q_0, q_2\}$	$\emptyset$
q_3	$\{q_1\}$	$\{q_0\}$	$\emptyset$