Automata Theory: Assignment 4
Due date: September 20 (Thursday)

Problem 1 (6 points)
For each of the following three languages on $\Sigma = \{a, b\}$, draw a deterministic finite automaton that accepts it:

(a) All strings that have no $b$'s (note that it includes $\lambda$).
(b) All strings with at least two $a$'s and any number of $b$'s.
(c) All strings with at most two $a$'s and any number of $b$'s.

Problem 2 (4 points)
For the alphabet $\Sigma = \{a, b\}$, draw a deterministic finite accepter that is equivalent to the following nondeterministic accepter:

![Diagram](Image)