Exercise 9

Given FA $A$ where $\Sigma := \{a, b\}$ as shown on the right. Draw the oracle-automaton $Oracle(A)$ as defined on lecture slide 8. Make $Oracle(A)$ complete by adding an error state.

Exercise 10

Given FA $A$ from Exercise 9, draw the optimized oracle-automaton $Oracle(A)$ as defined on lecture slide 9. Is $Oracle(A)$ complete? Justify your answer.

Exercise 11

Draw the I/O-automaton for FA $A$ as shown on the right.

Exercise 12

Draw an I/O-automaton modelling the digital circuit shown on the right. Use $\Sigma := \Theta := \{0, 1\}$ as input- and output-alphabet.