1 NFAs to DFAs
Convert the following NFA to a DFA by using subset construction.

2 State minimization
Use the state minimization algorithm from lecture to minimize the following finite state machine.

3 Non-regular Languages
Prove that the set \( \{0^{2n}1^n : n \geq 0 \} \) is not regular by showing that it is not recognized by any DFA.