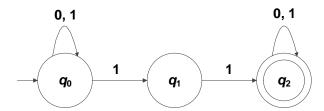
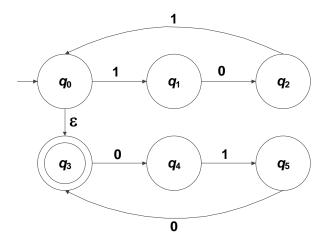


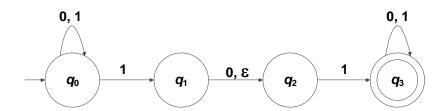
This NFA accepts all strings that are "multiples" of 10 (such as 10, 1010, 101010) including the empty string.



This NFA accepts all strings that contain the substring 11.



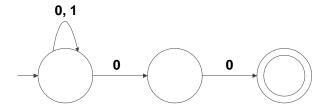
This NFA accepts all strings that are "multiples" of 010 (such as 010, 010010, 010010010) or strings that are multiples of 101 (such 101, 1011011, 101101101), or strings that are multiples of 101 followed by multiples of 010 (such as 101010, 101101010010). The NFA also accepts the empty string.



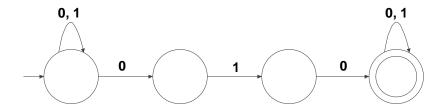
NFA accepts all strings that contain the substring 11 or 101.

Give the state diagram of the following NFAs (for the design of NFA's, you do not have to indicate the exact description of each state):

1. An NFA that recognizes the language $L = \{w \mid w \text{ ends with a OO}\}$. Assume that the alphabet $\Sigma = \{0, 1\}$.



2. An NFA that recognizes the language $L = \{w \mid w \text{ contains the substring O10}\}$. Assume that the alphabet $\Sigma = \{0, 1\}$.



Construct the equivalent DFA for the following NFA:

