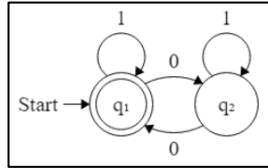
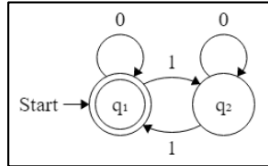


1. Regular Languages Closed Under Union (Construction Example)

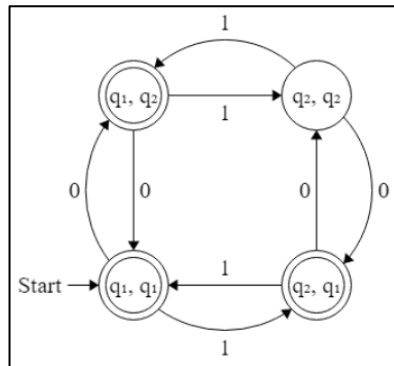
1. Draw the FA M_1 that accepts L_1 .



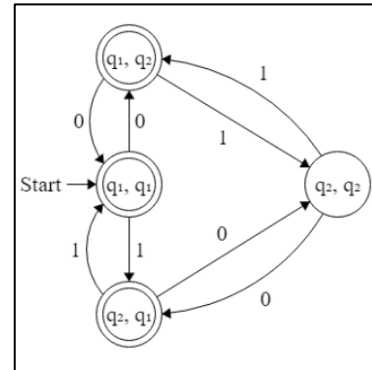
2. Draw the FA M_2 that accepts L_2 .



3. Draw the FA M that accepts the union of the L_1 and L_2 FAs.



(OR)



2. NFA to DFA Construction

- (a) What language does this NFA recognize?

The NFA recognizes the language $L = \{w \in \{0,1\}^* \mid w \text{ ends with a } 1\}$

- (b) Construct a DFA that simulates this NFA.

