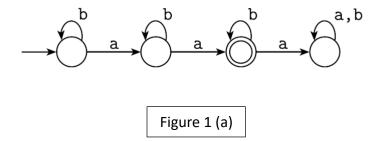
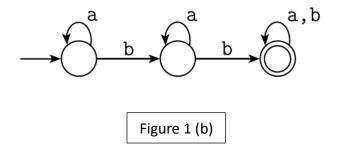
The languages L and M are defined using DFA_L (refer to Figure 1(a)) and DFA_M (refer to Figure 1(b)) respectively. Constructs the product DFA for language N if,

- a) $N = L \cup M$
- b) $N = L \cap M$
- c) N = L M
- d) You need to prove (disproof) that $L \subseteq M$.
- e) You need to prove (disproof) that L = M.





The languages L and M are defined using DFA_L (refer to Figure 2(a)) and DFA_M (refer to Figure 2(b)) respectively. Constructs the product DFA for language N if,

- a) $N = L \cup M$
- b) $N = L \cap M$
- c) N = L M
- d) You need to prove (disproof) that $L \subseteq M$.
- e) You need to prove (disproof) that L = M.

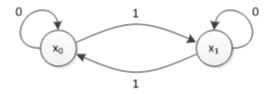


Figure 2 (a)

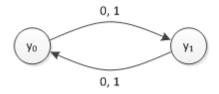


Figure 2 (b)