The circuit shown in Figure 1 will be analyzed.

1) Find the Boolean functions of the flip-flop inputs (J_A, K_A, J_B, K_B).
2) Find the Boolean functions of the output (y).
3) Find the state equations for A, B. (Q=Jq′+K′q, Q(t+1)=JQ(t)′+K′Q(t))
4) Draw the state transition table of the circuit.

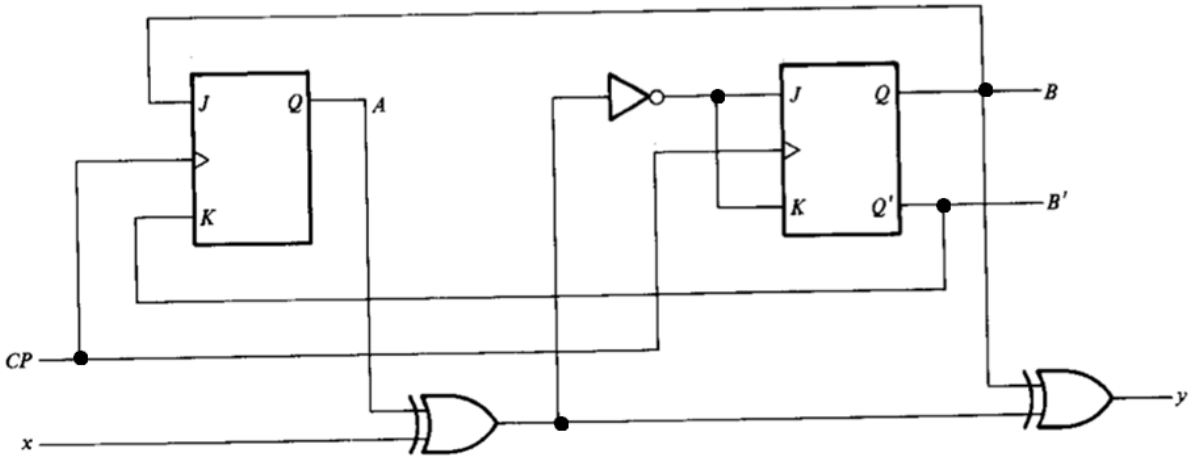

Figure 1