



Minimization

1. $(q_0, q_4), (q_1, q_4), (q_2, q_4), (q_3, q_4), (q_5, q_4)$ are distinguishable, as q_4 is an accepting state while others are not.
2. $(q_0, q_5), (q_1, q_5), (q_2, q_5), (q_3, q_5)$ are distinguishable, as on input b , from q_5 we go to q_4 , whereas from q_0, q_1, q_2, q_3 we go to q_2, q_3, q_5 , and $(q_4, q_2), (q_4, q_3), (q_4, q_5)$ are distinguishable.
3. $(q_0, q_2), (q_1, q_2), (q_0, q_3), (q_1, q_3)$ are distinguishable, as from q_0, q_1 on input b we go to q_2, q_3 , whereas from q_2, q_3 on input b we go to q_5 , and (q_2, q_5) and (q_3, q_5) are distinguishable.

q_1					
q_2	X3	X3			
q_3	X3	X3			
q_4	X1	X1	X1	X1	
q_5	X2	X2	X2	X2	X1
	q_0	q_1	q_2	q_3	q_4

