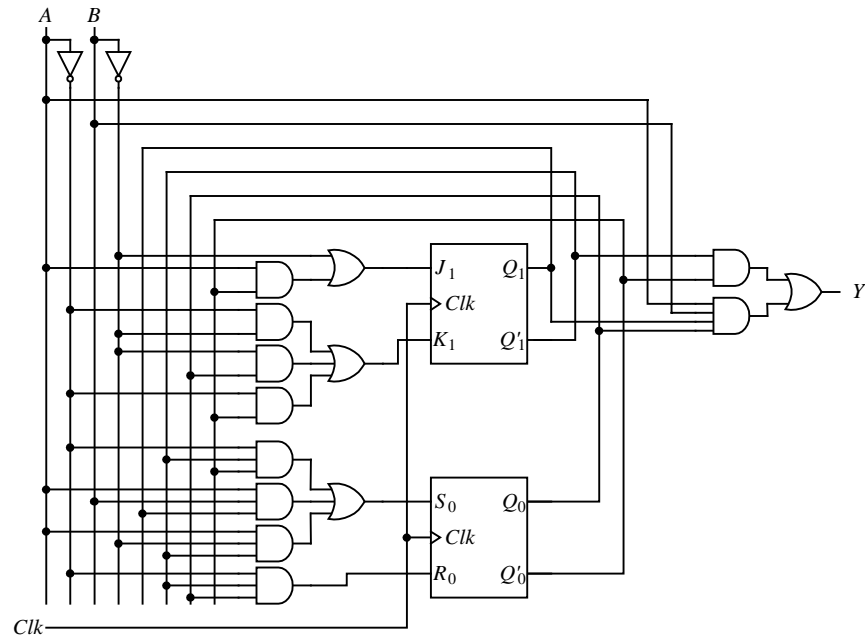# CS120B – Homework #1 (version 2)
Given October 10, 2001. Due October 16, 2001

1. Derive the next-state/output table and state diagram for the following sequential circuit.   (6)

2. Synthesize the sequential circuit for the following next-state/output table using a *SR* flip-flop for Q_0 and a *JK* flip-flop for Q_1.   (6)

Current State	Next State / Output			
	AB			
$Q_1 Q_0$	00	01	10	11
0 0	11/1	01/1	11/1	10/1
0 1	10/0	00/0	11/0	01/0
1 0	00/0	00/0	11/0	10/0
1 1	01/0	11/0	11/0	01/1