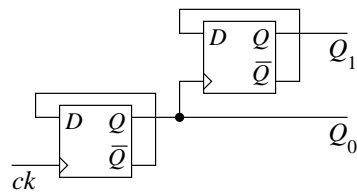


Question Seq-1: (Solution, p 2) Tabulate how the circuit at right changes as the input ck toggles through the inputs at left.

ck	Q_1	Q_0
0		
1		
0		
1		
0		
1		
0		
1		
0		
1		



Question Seq-2: (Solution, p 2) Design a circuit that takes a single input ck and outputs two bits $Q_1 Q_0$, whose values cycle to the next number of the sequence 00, 01, 11, 10, 00, 01, 11, 10, . . . each time ck changes from 0 to 1.

Solution Seq-1: (Question, p 1)

ck	Q_1	Q_0
0	0	0
1	1	1
0	1	1
1	1	0
0	1	0
1	0	1
0	0	1
1	1	0
0	1	0
1	1	1

Solution Seq-2: (Question, p 1)