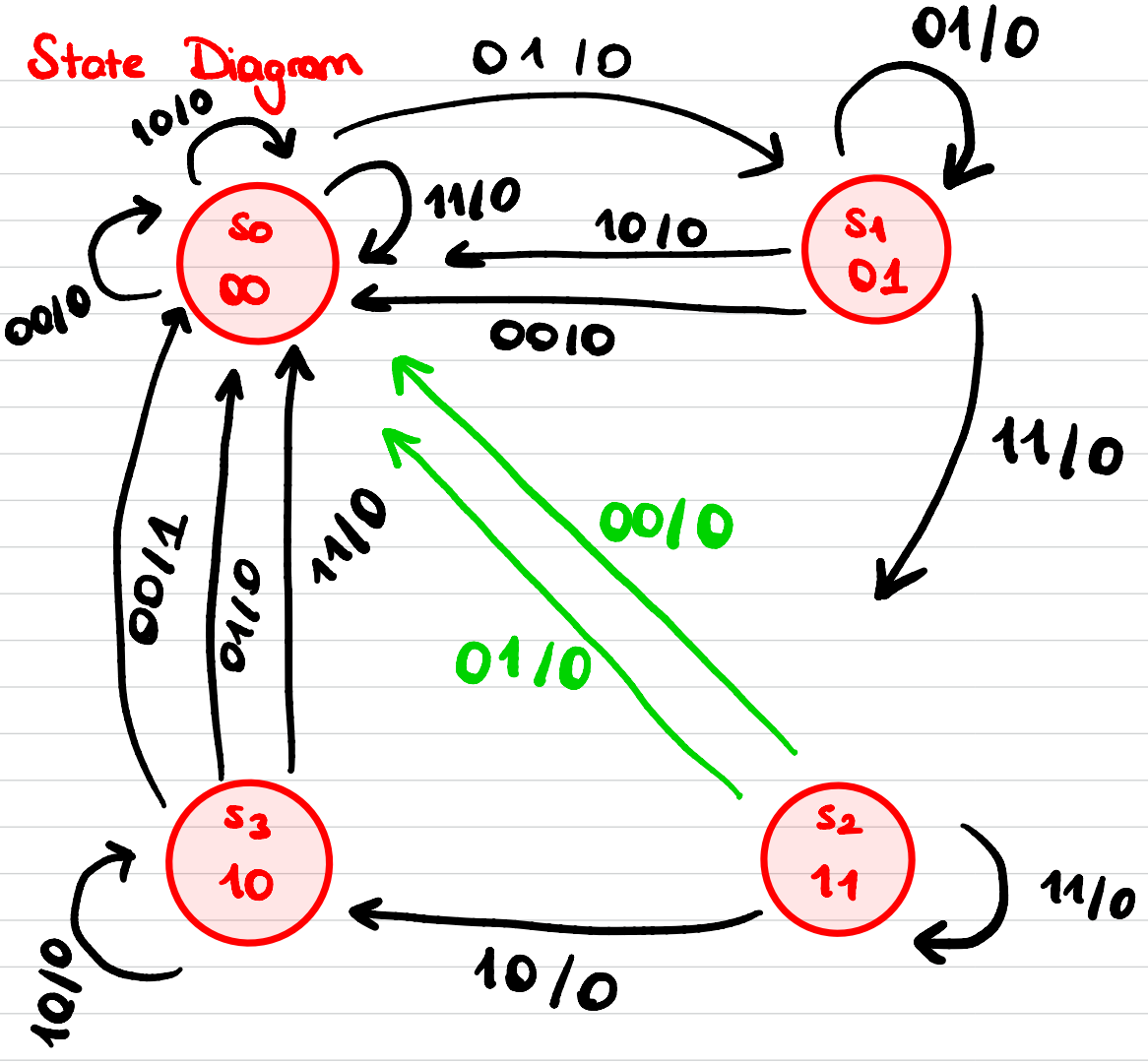
State Diagram



State Table

A	B	a b	A(t+1)	B(t+1)	out
0	0	0 0	0	0	0
0	0	0 1	0	1	0
0	0	1 0	0	0	0
0	0	1 1	0	0	0
0	1	0 0	0	0	0
0	1	0 1	0	1	0
0	1	1 1	1	1	0
0	1	1 0	0	0	0
1	1	0 0	0	0	0
1	1	0 1	0	0	0
1	1	1 1	1	1	0
1	1	1 0	1	0	0
1	0	0 0	0	0	1
1	0	0 1	0	0	0
1	0	1 1	0	0	0
1	0	1 0	1	0	0

output

ab \ AB	00	01	11	10
00				1
01				
11				
10				

$= a'b' A.B'$

A(t+1)

ab \ AB	00	01	11	10
00				
01				
11		1	1	
10			1	1

$A(t+1) = ab\,B + ab'A$

B(t+1)

ab \ AB	00	01	11	10
00				
01	1	1		
11		1	1	
10				

$$B(t+1) = abB + a'b'A'$$