

بخش سیزدهم Ex 5

چهار State داریم پس $S = 2^4 = 16$ → دو تا flip flop نیاز

مسئله: D flip flop

Present		input	next		output	flip flop	
A	B	x	A ⁺	B ⁺	y	D _A	D _B
S ₀	0	0	0	1	0	0	1
	0	1	0	0	1	0	0
S ₁	0	0	1	0	1	1	0
	0	1	1	1	0	1	1
S ₂	1	0	0	0	1	0	0
	1	0	0	1	0	0	1
S ₃	1	1	1	1	0	1	1
	1	1	1	0	1	1	0

A \ Bx	00	02	22	20
0	0	0	1	1
2	0	0	1	1

$$D_A = B$$

A \ Bx	00	02	22	20
0	1	0	1	0
2	0	1	0	1

$$D_B = A'B'x' + AB'x + A'Bx + ABx'$$

A \ Bx				
	00	01	11	10
0	0	1	0	1
1	1	0	1	0

$$y = A'B'x + A'Bx' + AB'x' + ABx$$