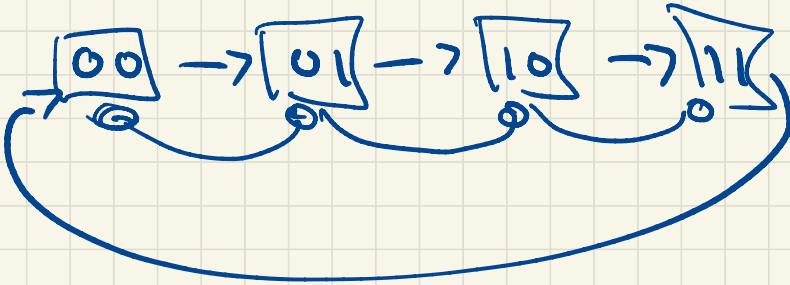
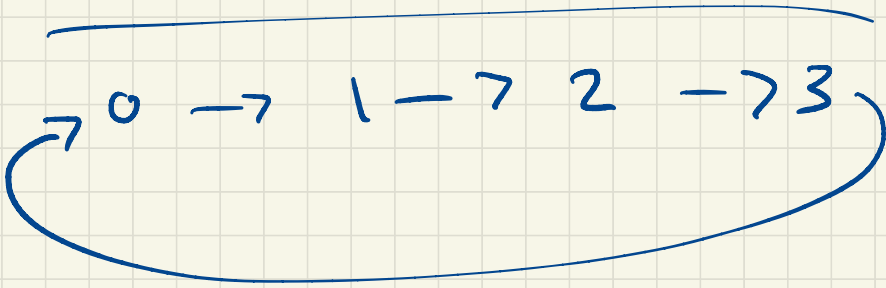
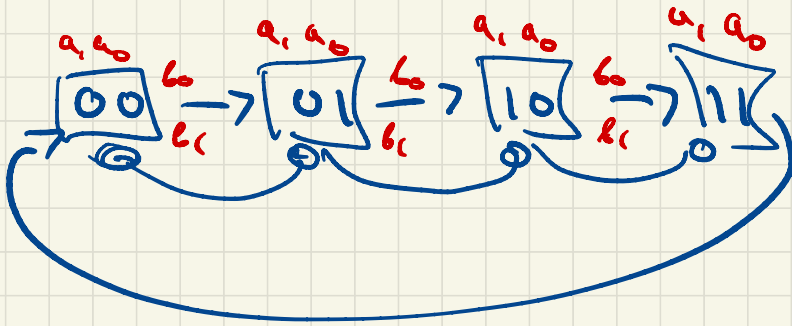


a_1	a_0	
0	0	0
0	1	1
1	0	2
1	1	3



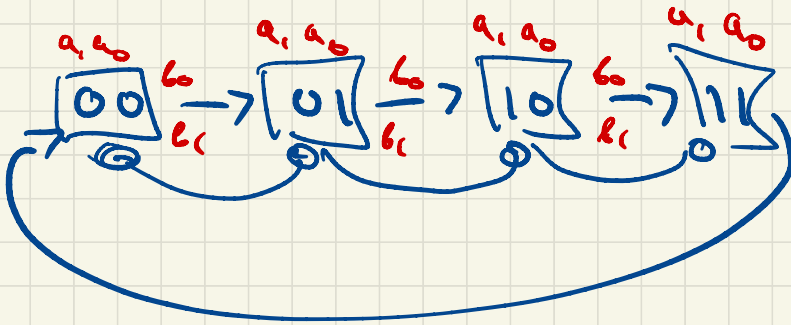
State Machine



$b_0(a_1, a_0) \rightarrow b_0$ the next state for a_0

$b_1(a_1, a_0) \rightarrow b_1$

What are the formulas?



a_1	a_0	next a_0 b_0
0	0	1
0	1	0
1	0	1
1	1	0

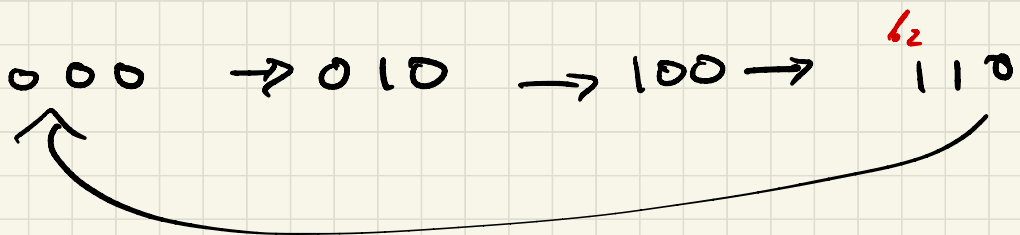
a_1	a_0	next a_1 b_1
0	0	0
0	1	1
1	0	1
1	1	0

⊕
xor
slur...

$$b_0 = a_1' a_0' + a_1 a_0'$$

$$b_1 = a_1' a_0 + a_1 a_0'$$

000 → 010 → 100 → ^{6₂}110



001 → 011 → 101 → 111

