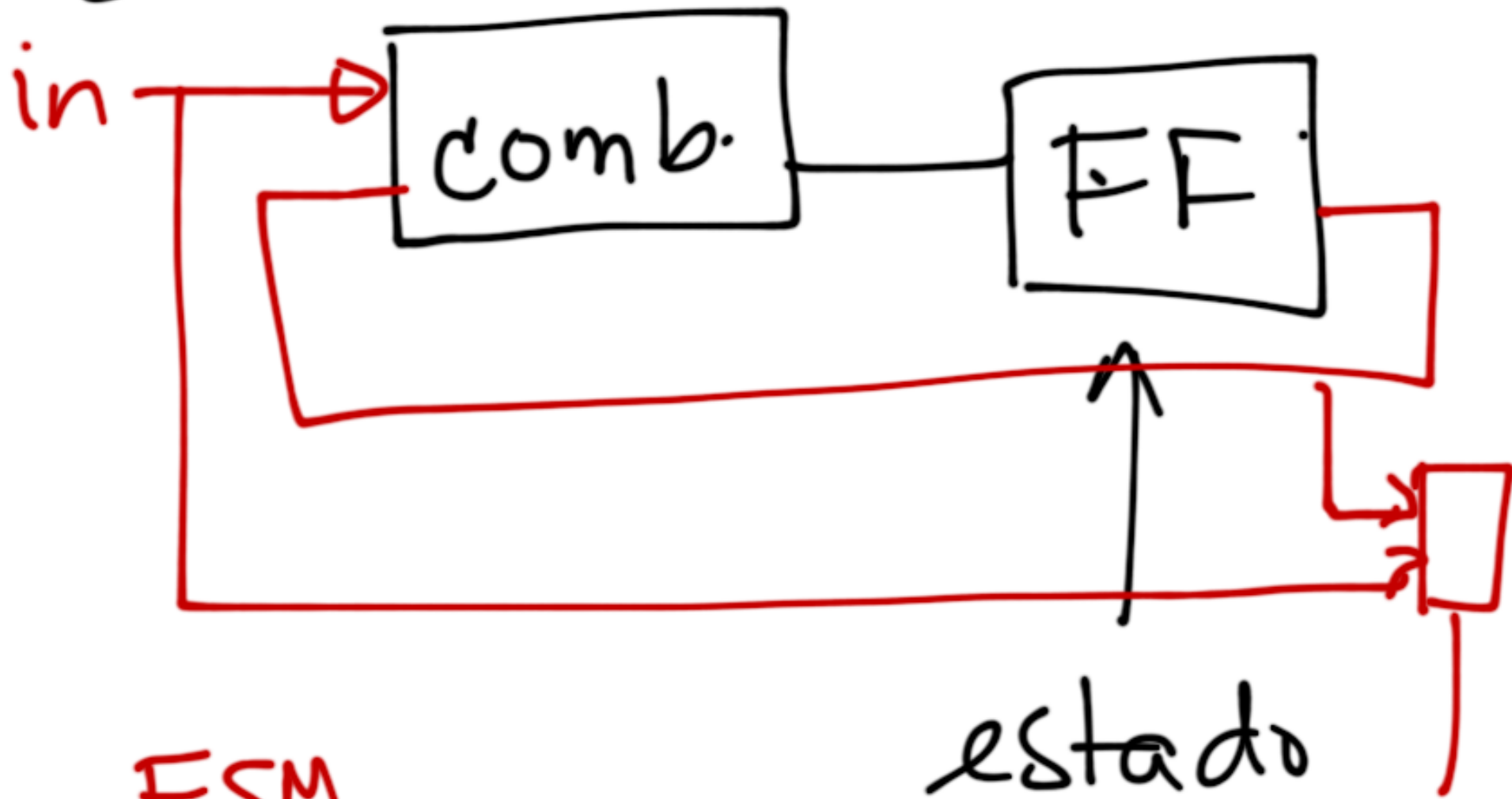


Anuncio: Prueba 5  
Mierc. 11 abril  
Capitulo 5

So far:



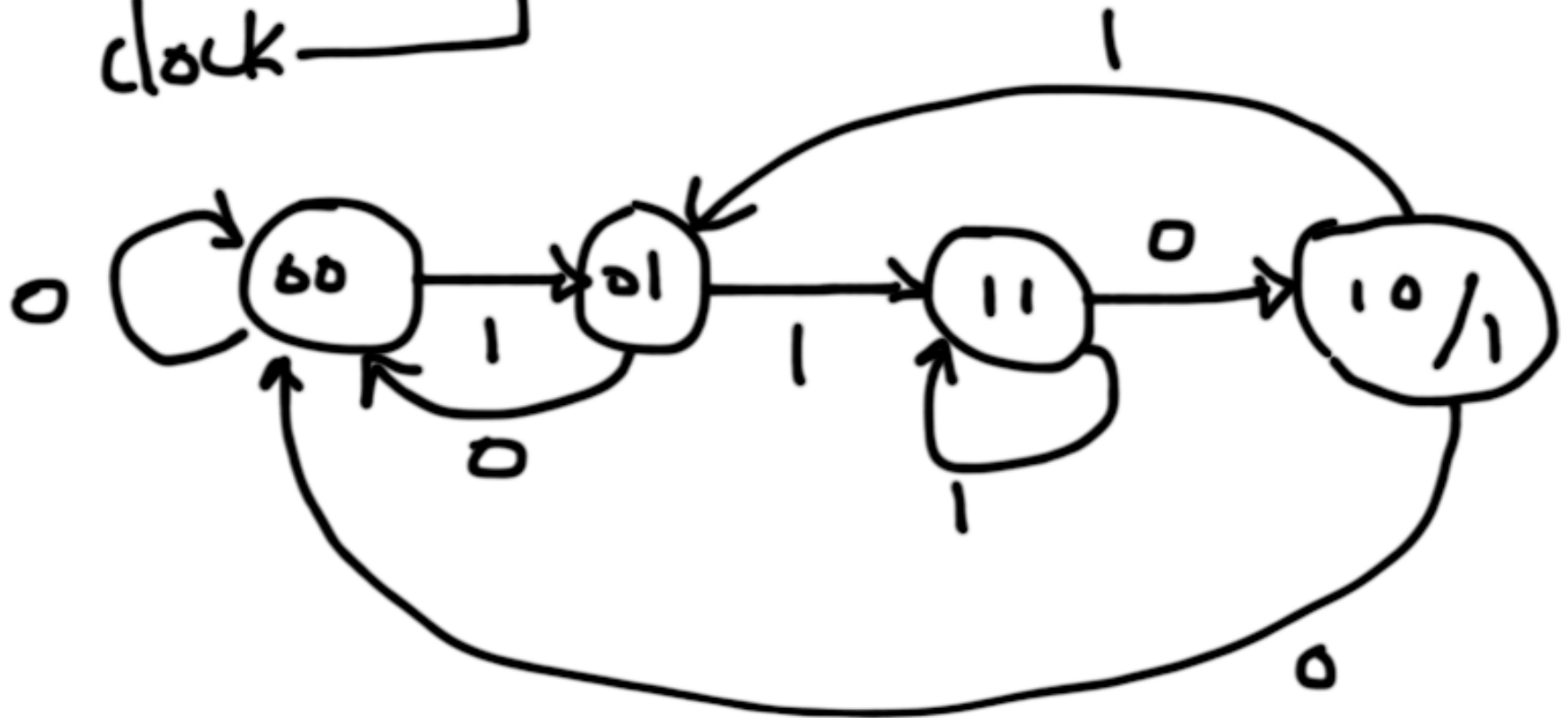
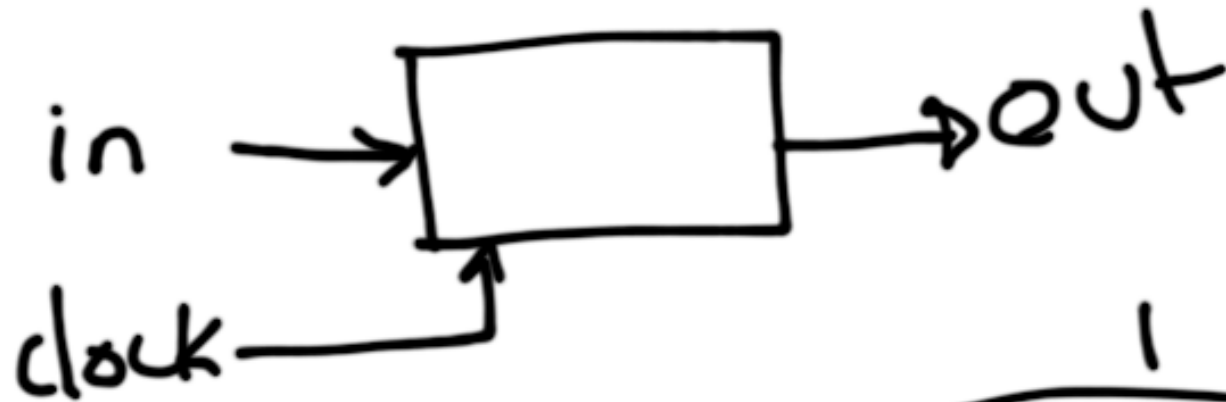
FSM

finite state machine  
mealy ; moore

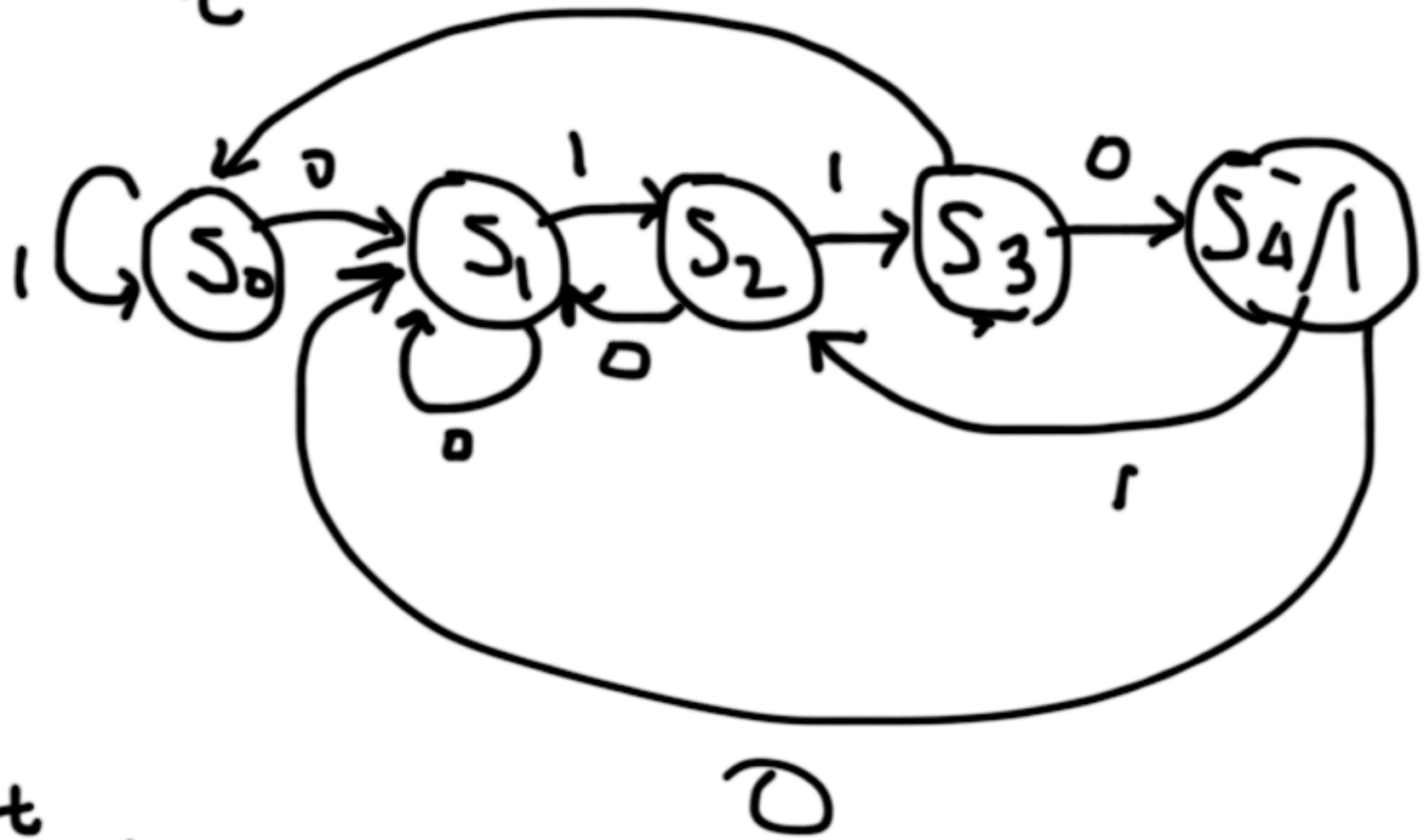
out

- analysis → state diag  
→ state tables
- design
  - word problem
  - state diag. (initial)
  - state reduction
  - state binary codes
  - simplified state diag.  
state table
  - combinational logic  
design

sequence detector -  
Example: detect 011 (two  
1's followed by a 0)



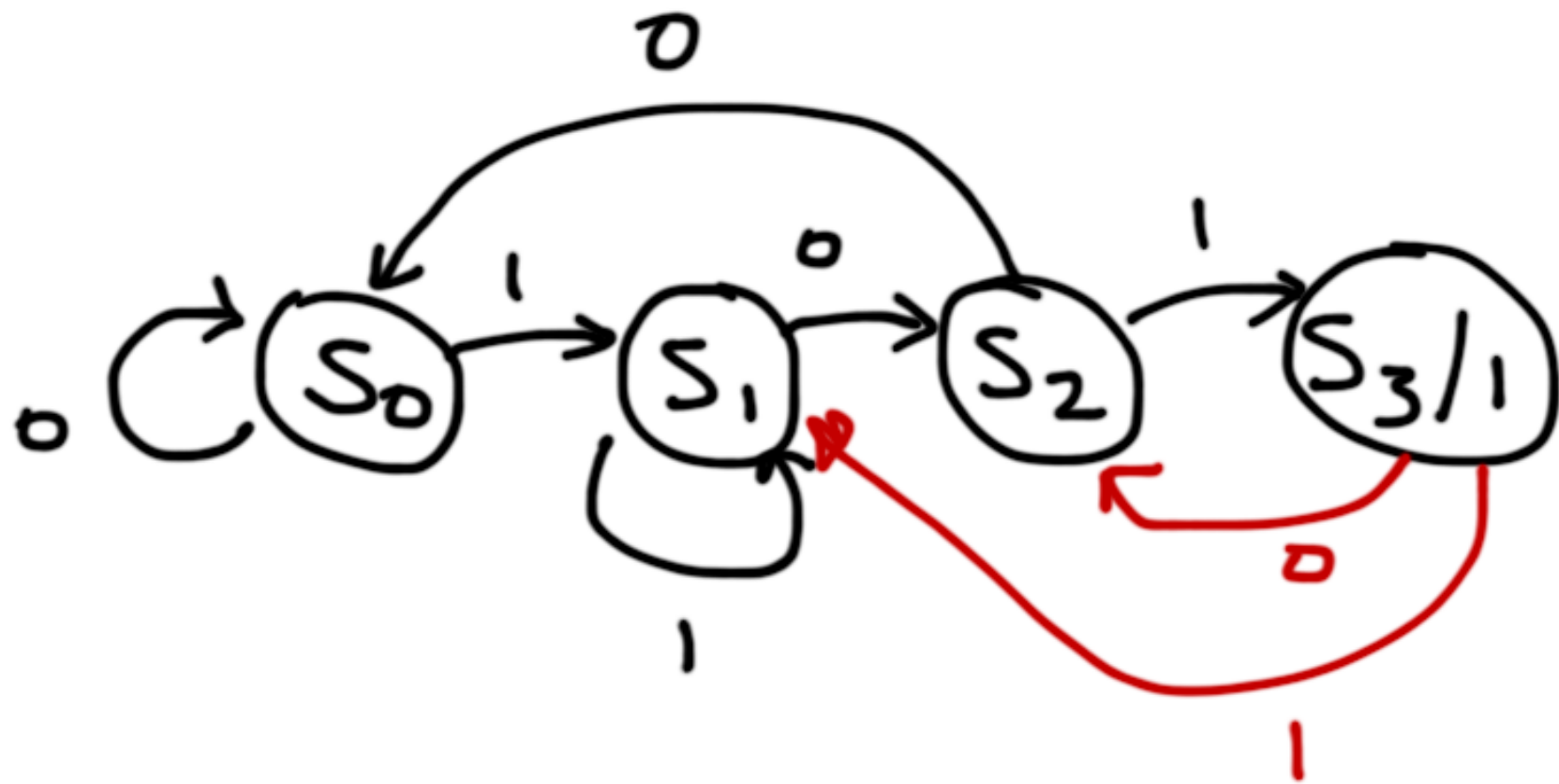
0110 →  
 ← t



t →  
 00110110  
 00000100

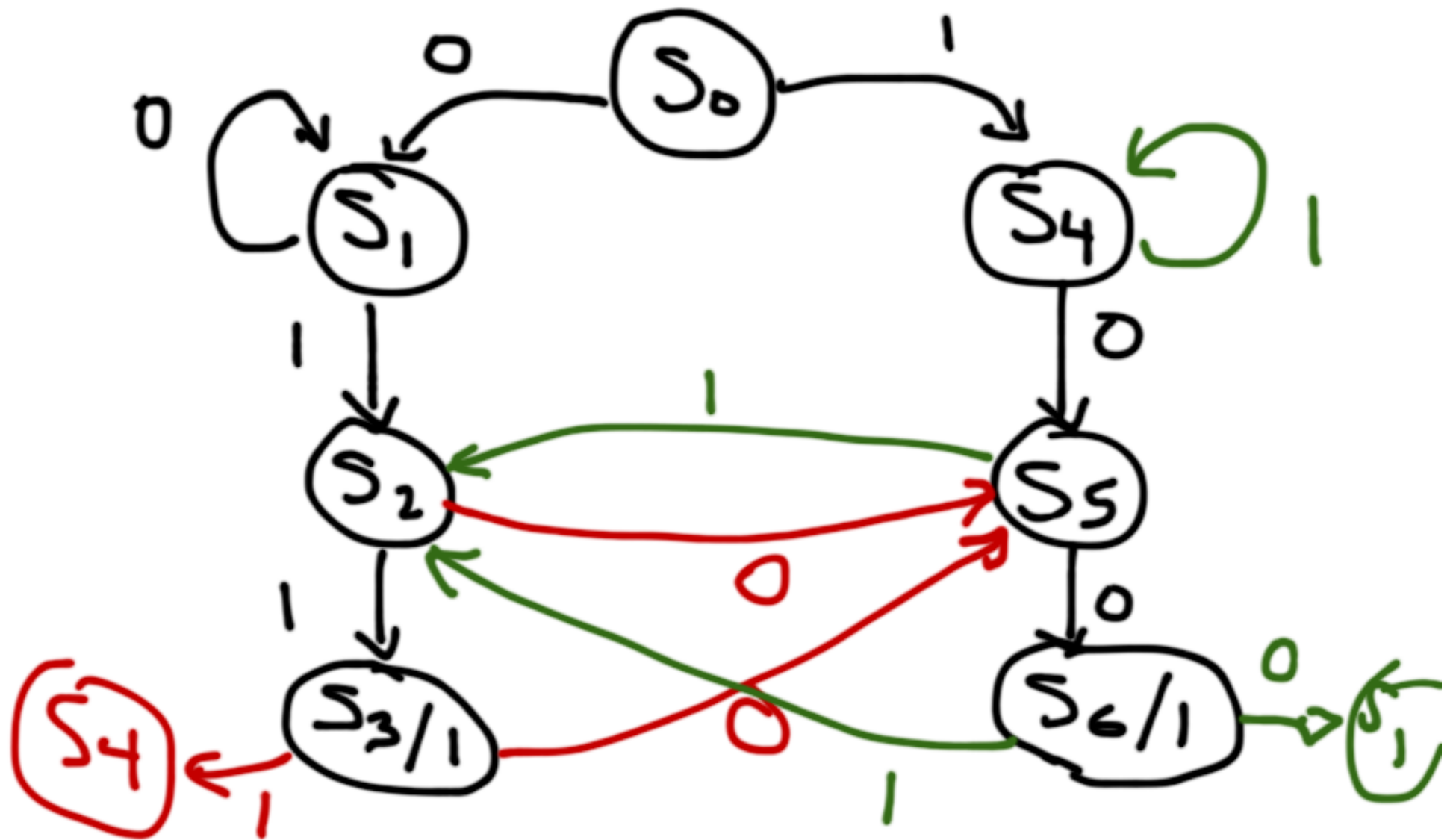
input  
 output

detect 101



10101

Detect 011 ( $\emptyset$  followed by two 1's) on 100



pres.		next $x=0$		next $x=1$	
		state	out	state	out
000	$S_0$	$S_1$	0	$S_4$	0
001	$S_1$	$S_1$	0	$S_2$	0
101	$S_2$	$S_5$	0	$S_3$	0
111	$S_3$	$S_5$	1	$S_4$	1
110	$S_4$	$S_5$	0	$S_4$	0
010	$S_5$	$S_6$	0	$S_2$	0
011	$S_6$	$S_1$	1	$S_2$	1

↑ Gray-like code assignment