

37

[CS M51A FALL 18] QUIZ 3

Duration: 30 minutes

11/16/2018

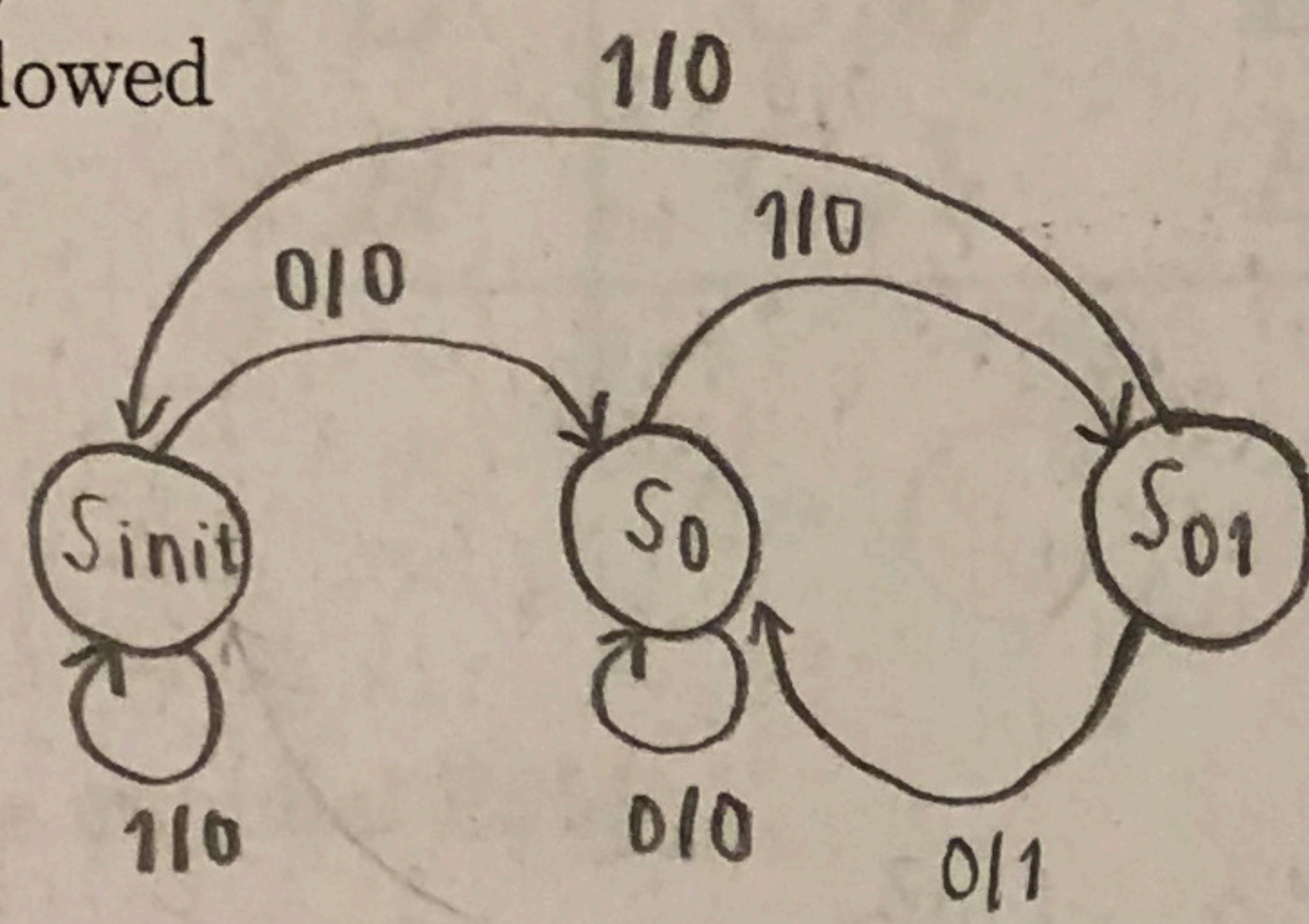
Problem 1 (10 points)

Draw the state diagram for a pattern detector that recognizes the pattern : "010", that is :

$$z(t)=1 \text{ if } x(t-2,t)=010$$

$$z(t)=0 \text{ otherwise}$$

Overlapping allowed



	0	1
Sinit	S0/0	S1/0
S0	S0/0	S01/0
S01	S0/1	S1/0

10