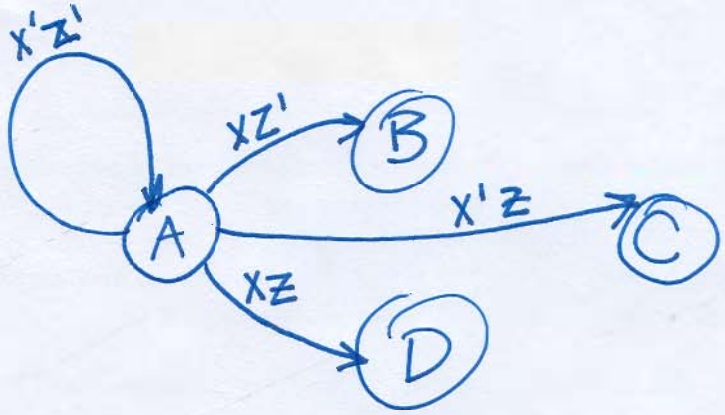
ECOR 2181 Extra Notes - 12/1/08



For our "machine", we have inputs x, y, z. Go to state B if x=1, go to state C if z=1, remain in A otherwise. What if x=1 and z=1? In the case of x=1, z=1, go to state D.

x y z	next
0 0 0	A
0 0 1	C
0 1 0	A
0 1 1	C
1 0 0	B
1 0 1	D
1 1 0	B
1 1 1	D

Identify if some transitions are missing or redundant.

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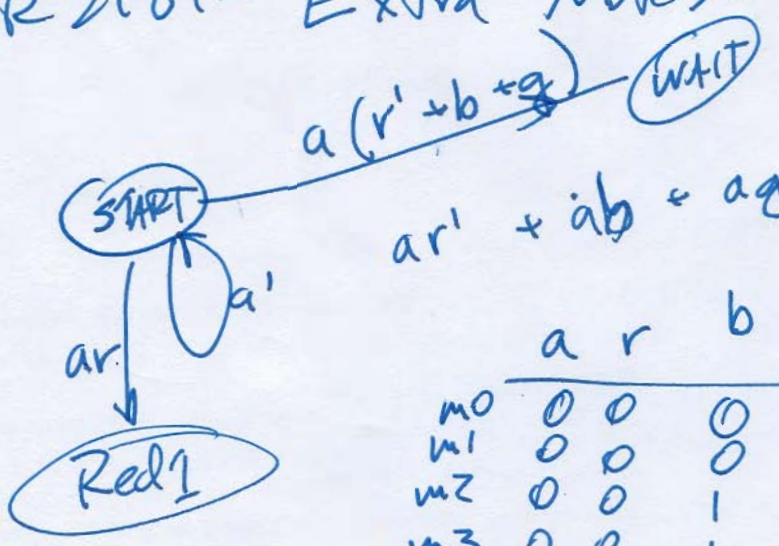

$ar' + ab + ag$

	a	r	b	g	
m0	0	0	0	0	START
m1	0	0	0	1	START
m2	0	0	1	0	ST
m3	0	0	1	1	ST
m4	0	1	0	0	ST
m5	0	1	0	1	ST
m6	0	1	1	0	ST
m7	0	1	1	1	ST
m8	1	0	0	0	WAIT
m9	1	0	0	1	WAIT
m10	1	0	1	0	WAIT
m11	1	0	1	1	WAIT
m12	1	1	0	0	Red1
m13	1	1	0	1	Red1 WAIT
m14	1	1	1	0	Red1 WAIT
m15	1	1	1	1	Red1 WAIT

In a FSM, each set of inputs can cause you to go to only one next state

Violation!!!

solution: ar should be $arb'g'$

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