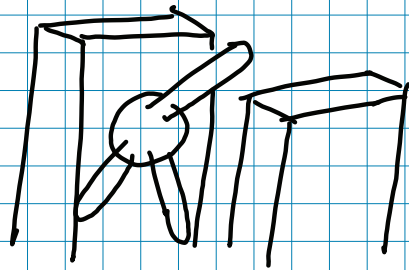
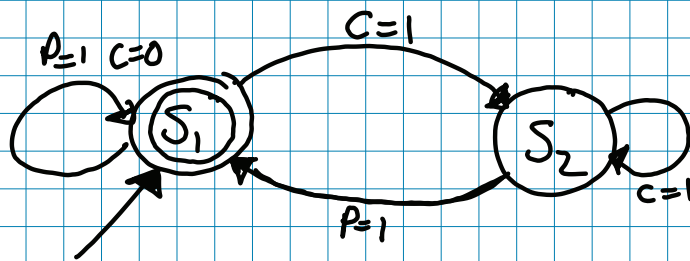
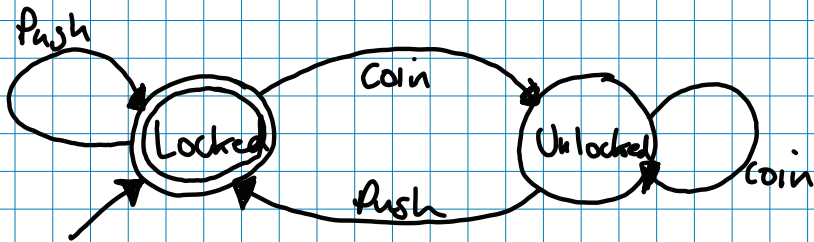


Finite State Machine (FSM)

FSA
Automation



Turnstile

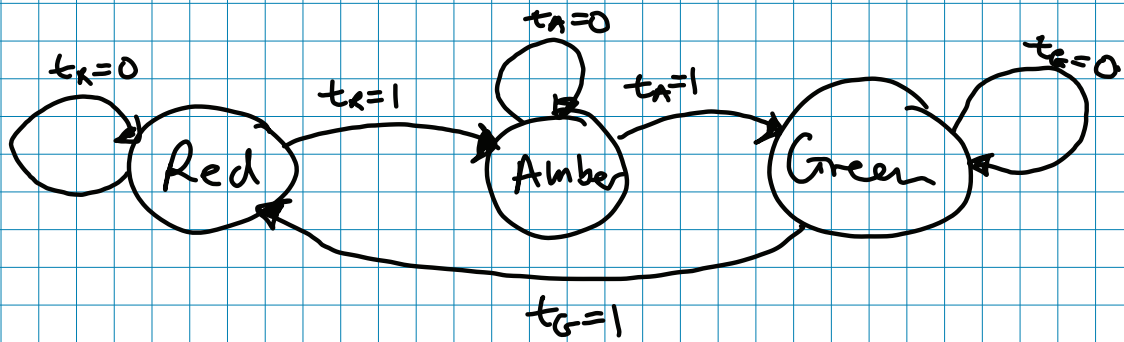


$S_1 = \text{locked}$
 $S_2 = \text{unlocked}$
 $C = \text{coin}$
 $P = \text{Push}$

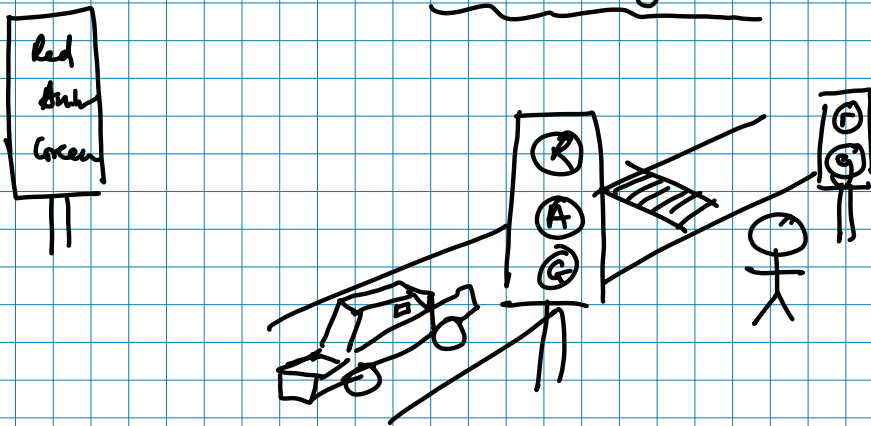
Symbol	Meaning
○	State
→ ○	Start State
⊙	Accept State (End)
→	Transitions

Current	Coin	Push	New
S_1	0	0	S_1
S_1	0	1	S_2
S_1	1	0	S_2
S_1	1	1	S_1
S_2	0	0	S_2
S_2	0	1	S_1
S_2	1	0	S_1
S_2	1	1	S_2

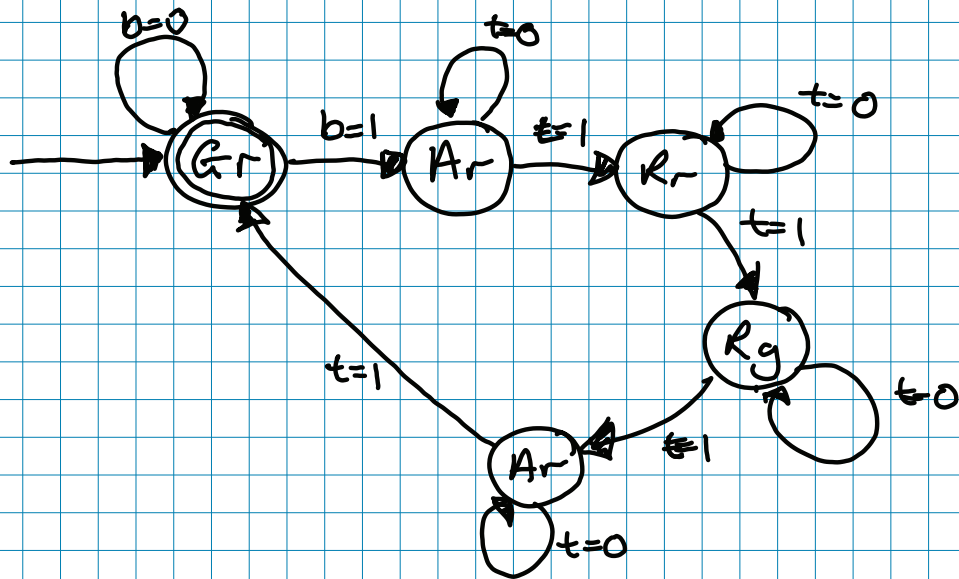
Traffic lights



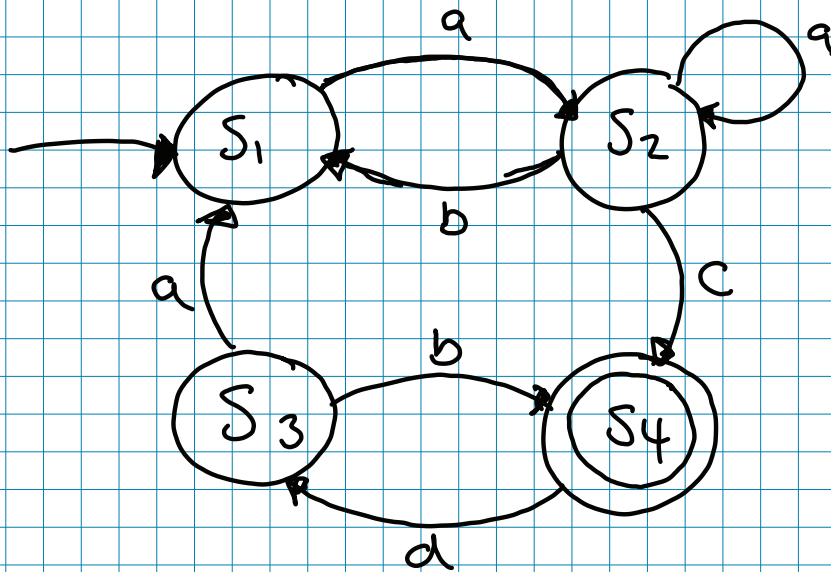
Simple system



States \rightarrow $R_r, R_g, A_r, A_g, G_r, G_g$



Example



- abac ✓
- abacdaac ✓
- aaaac ✓
- aaaacd ✗
- a a a a ✗