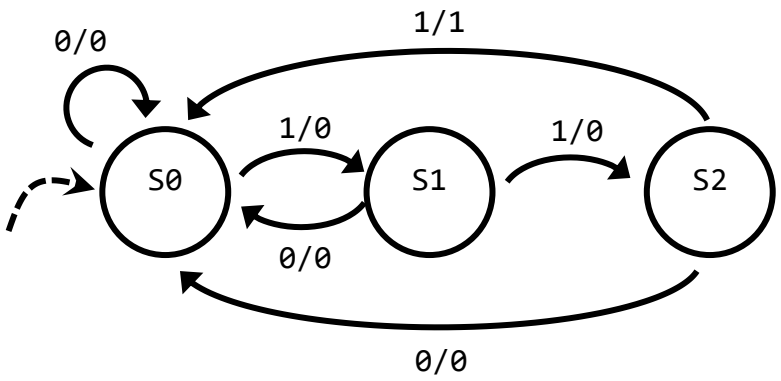
Long-press FSM



Truth table:

PS	In	NS	Out

In \ PS	00	01	11	10
0				
1				

In \ PS	00	01	11	10
0				
1				

In \ PS	00	01	11	10
0				
1				

State Diagram Properties

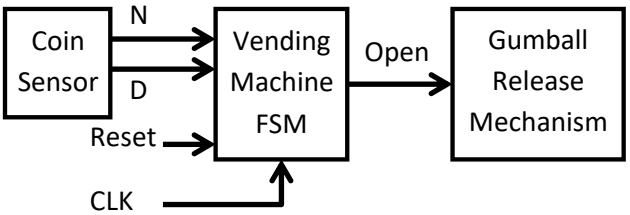
- For S states, how many state bits do we need?

- For I inputs, what is the *maximum* number of transition arrows on the state diagram?

- For s state bits and I inputs, how many rows is the truth table?

Vending Machine FSM

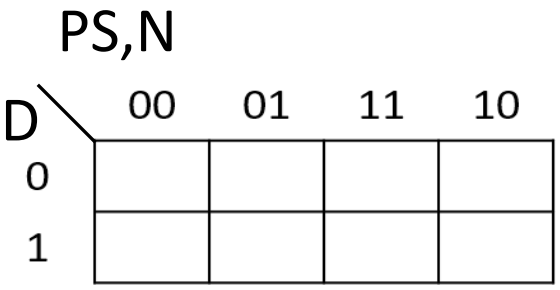
- Description/behavior:
  - Single coin slot for dimes and nickels
  - Releases gumball after ≥ 10 cents deposited
  - Gives no change

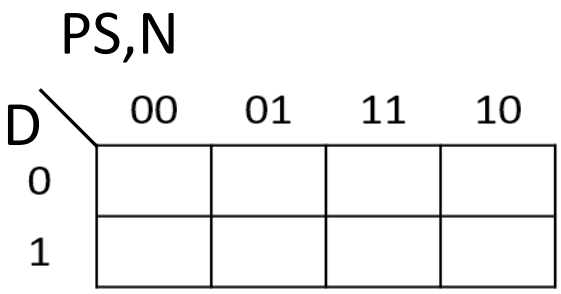


State Diagram:

Truth tables and logic minimization

PS	N	D	NS	Open
0	0	0		
0	0	1		
0	1	0		
0	1	1		
1	0	0		
1	0	1		
1	1	0		
1	1	1		





Boolean equations

NS =

Open =

Circuit Implementation

