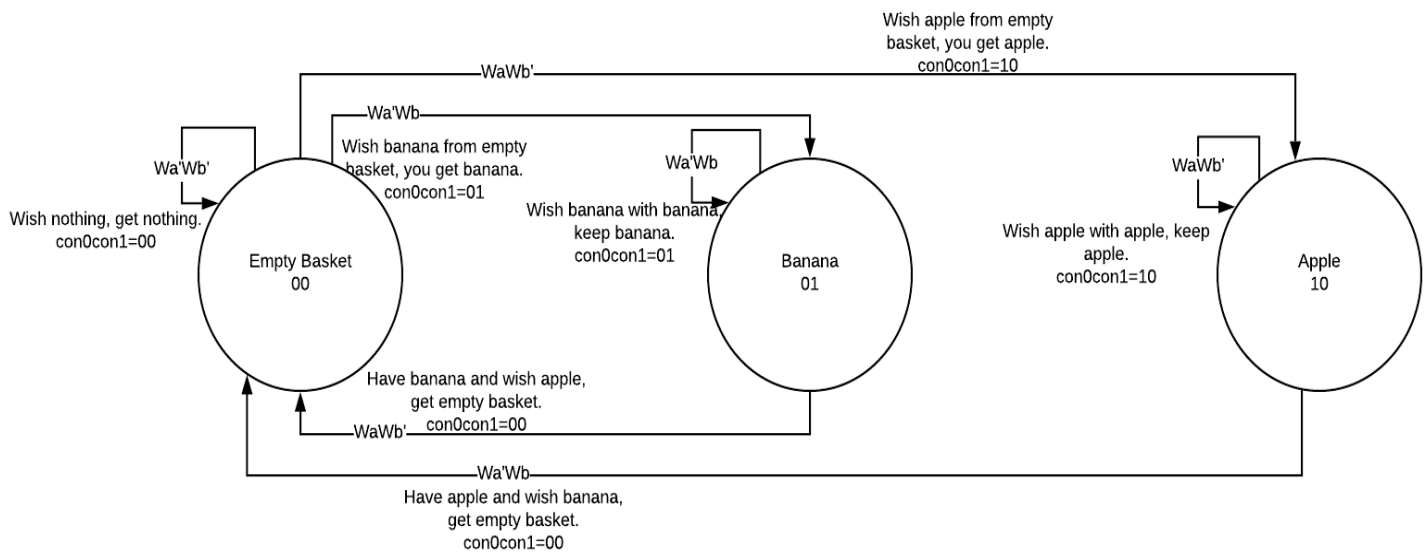


Inputs: (Wish apple) Wa , (Wish banana) Wb

Output: (Contents of the basket) $con0$, $con1$



$c0$	$c1$	Wa	Wb	$con0$	$con1$	$n0$	$n1$
0	0	0	0	0	0	0	0
0	0	1	0	1	0	1	0
0	0	0	1	0	1	0	1
0	1	0	0	0	1	0	1
0	1	0	1	0	1	0	1
0	1	1	0	0	0	0	0
1	0	0	0	1	0	1	0
1	0	1	0	1	0	1	0
1	0	0	1	0	0	0	0

The next output is the next state.

$con0con1 = n0n1$

$n0$ is these arguments in parenthesis as long as $c1$ is not true (you don't currently have a banana).

$n0 = c1'(c0'WaWb' + c0Wa'Wb' + c0WaWb')$

$n1$ is these arguments in parenthesis as long as $c0$ is not true (you don't currently have an apple).

$n1 = c0'(c1'Wa'Wb + c1Wa'Wb' + c1Wa'Wb)$