Input 1	Input 2	Sum Output	Carry Output
0	0	0	0
0	1	1	0
1	0	1	0
1	1	0	1
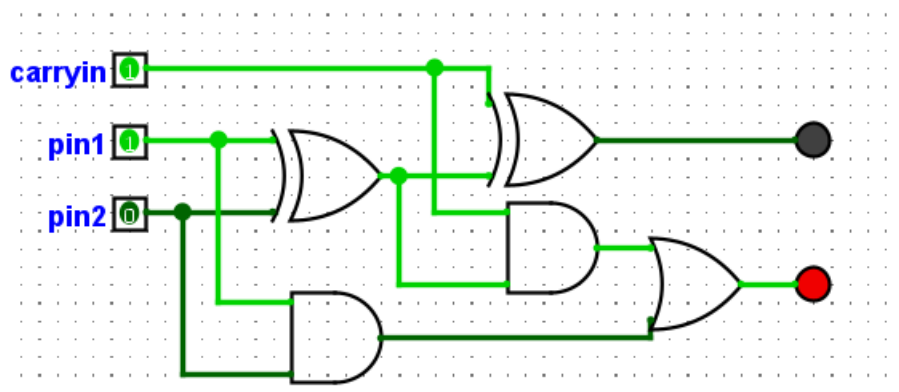
Input 1	Input 2	Carry in	Sum Output	Carry Output
0	0	0	0	0
0	1	0	1	0
1	0	0	1	0
1	1	0	0	1
0	0	1	1	0
0	1	1	0	1
1	0	1	0	1
1	1	1	1	1
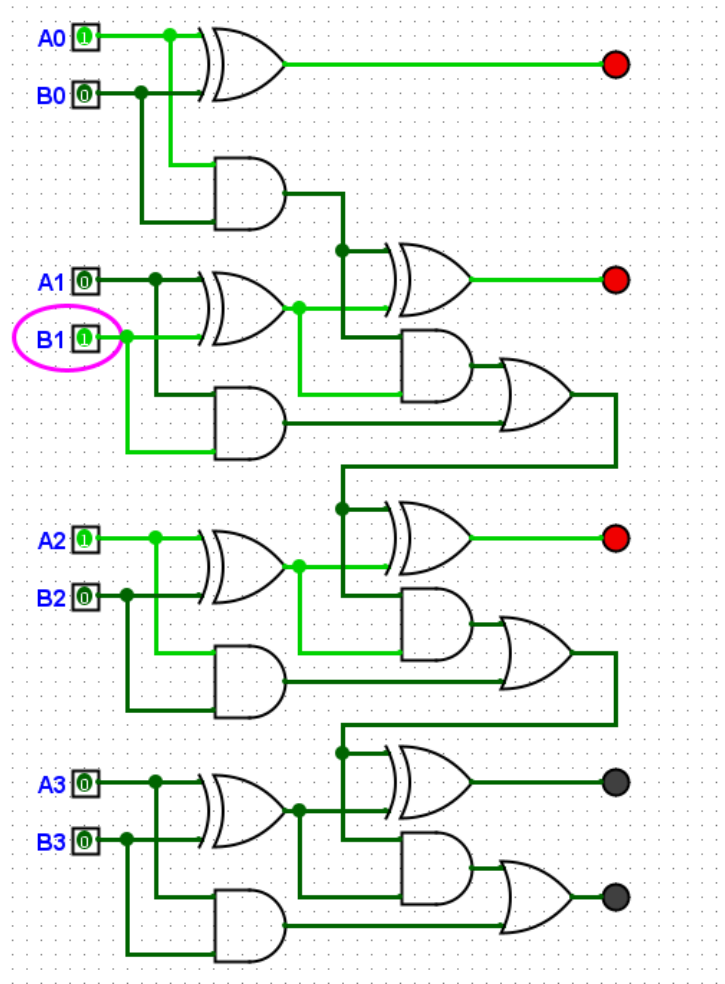
Input A	Input B	Output
0101	0000	0101
0101	0001	0110
0101	0010	0111
0101	0011	1000
0101	0100	1001
0101	0101	1010
0101	0110	1011
0101	0111	1100
0101	1000	1101
0101	1001	1110
0101	1010	1111
0101	1011	0000 (carry 1)
0101	1100	0001 (carry 1)
0101	1101	0010 (carry 1)
0101	1110	0011 (carry 1)
0101	1111	0100 (carry 1)