

A	B	C_{in}	S	C_{out}	Binary representation
0	0	0	0	0	00
1	0	0	1	0	01
0	1	0	1	0	01
1	1	0	0	1	10
0	0	1	1	0	01
1	0	1	0	1	10
0	1	1	0	1	10
1	1	1	1	1	11