CSC258 lab1
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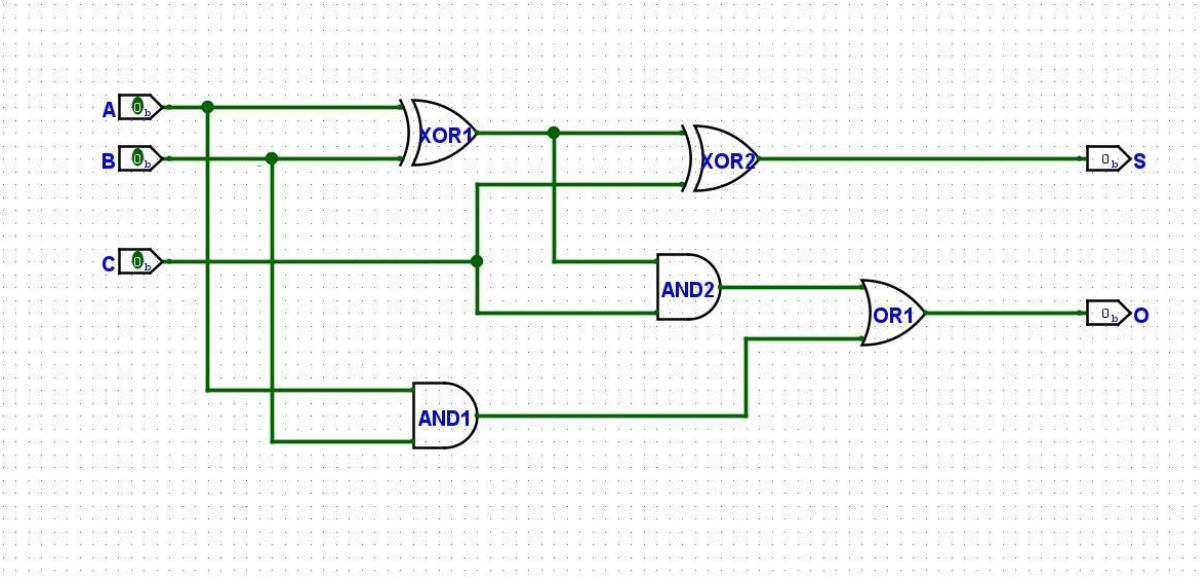

Truth Table

A	B	C	S	O
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	0	1	0	1
1	1	0	0	1
1	1	1	1	1

Description of the circuit:
If an odd number of inputs are in high state, then the output S is in high state as well. Otherwise, S is in a low state. That is, assuming the state of A, B and C is the binary digit on 2^0, output S shows the parity of the result of performing binary addition to all of them. As for output O, it shows the carry for the binary addition base on the assumption above.