Logic Circuit
Problem ID: a02p07logiccircuit

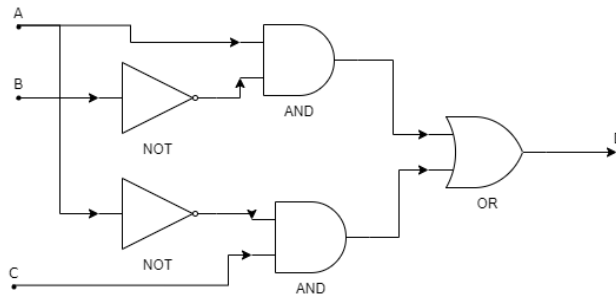Here is a simple logic circuit that has 3 inputs, A, B, and C, and 1 output D.

Figure 1: The logic circuit

The circuit contains three types of logic gates:

- A NOT gate takes one input x, and outputs 1 if $x = 0$, but 0 otherwise.

- An AND gate takes two inputs x and y, and outputs 1 if $x = y = 1$, but 0 otherwise.

- An OR gate takes two inputs x and y, and outputs 0 if $x = y = 0$, but 1 otherwise.

Write a program that is equivalent to the logic circuit above.

Input

Input consists of three lines. The first line contains the integer A, where A is either 0 or 1. The second line contains the integer B, where B is either 0 or 1. The third line contains the integer C, where C is either 0 or 1.

Output

Output the value of D, which is either 0 or 1.

Sample Input 1	Sample Output 1
0 0 0	0

Sample Input 2	Sample Output 2
0 0 1	1

Sample Input 3	Sample Output 3
1 1 1	0

Sample Input 4	Sample Output 4
1 0 0	1

Sample Input 5

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1
1
0
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Sample Output 5

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0
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