Problem A. Count The Ones

Input file:	*standard input*
Output file:	*standard output*
Time limit:	1 second
Memory limit:	256 mebibytes

Given three integers a, b and c. Calculate number of 1's in the binary representation of number $2^a + 2^b - 2^c$.

Input

Input consists of three integers a, b and c ($1 \le c < b < a \le 10^9$).

Output

Print one integer — number of 1's in the binary representation of $2^a + 2^b - 2^c$.

Example

standard input	standard output
3 2 1	2