

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 ($1 \leq c < b < a \leq 10^9$).

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