A. Simple Big Sum

You are given two integers a and b. Write a program to calculate their sum.

Sounds too easy? See the constrants below, and then read the Note section.

Input

Input contains two integers a and b ($-10^{18} \leq a, b \leq 10^{18}$) in two seperate lines.

Output

Print the sum of a and b.

Samples

Sample #1

Input	Output
`4` `8`	`12`

Sample #2

Input	Output
`-2147483648` `2147483647`	`-1`

Note

The range for 32-bit signed integer (`int` or `long` in C/C++) is $-2,147,483,648$ to $2,147,483,647$. Since the input numbers as well as their sum can exceed that range, you will need to use 64-bit integer (`long long` in C/C++). Remember that for `long long` we use the `%lld` format specifier instead of `%d` or `%ld`.