Modular Multiplication

Given two number. You just have to multiply them and find out the remainder if you divided it by 10000007.

Input

There will be several test cases. Each case contains two numbers, a and b where a and will be non negetive 64 bit numbers.

Output

Output will be the remainder if you modulo the result of multiplication of a and b by 10000007.

Example

Input:
56866 7875
85155953 29895845

Output:
Case #1: 7819442
Case #2: 9650119