

Problem F2101

Basic Number Operator

In this problem, you are given two numbers $n(1 \leq n \leq 100)$ and $m(1 \leq m \leq 100)$, one in each line. Print following value one by one in different line:

$n + m$

$n - m$

$n * m$

n/m (integer)

n/m (floating point number)

n^m

$n \bmod m$

Input

The input consists of 2 lines. The first line contains $n(1 \leq n \leq 100)$ and the second line contains $m(1 \leq m \leq 100)$

Output

Print the calculation result in the order described in the problem statement.

Sample Input

3
5

Sample Output

8
-2
15
0
0.6
243
3