

# Fast Power

You are asked to compute  $A^B$  (A to the power of B) ( $1 \leq A, B \leq 100\,000\,000$ ). You surely understand that this number can be quite astonishing and i don't like big numbers unless they are on my paycheck so I'm just interested in the remainder of  $A^B \bmod C$  ( $1 \leq C \leq 1000000$ )

## Input

Three integers A B and C.

## Output

Single integer - the result of the computation.

## Example

**Input:**

2 10 1000

**Output:**

24