Product

Input file:	standard input
Output file:	standard output
Time limit:	1 second
Memory limit:	256 megabytes

Given **three numbers** L, R and M. Print the **product** of all numbers from L to R (inclusive) module M.

Input

Only one line contains three numbers L, R and M ($1 \leq L, R, M \leq 10^5$).

It's guaranteed that $(L \leq R)$.

Output

Print the answer required above.

Example

standard input	standard output
1 20 10007	8707