A Simple Multiplication

Time limit: 0.05s **Memory limit:** 2M

Your computer engineering instructor decided to give you another task (you are the best in the class, after all):

Write a program that prints the result of $N^P \mod M$.

Unimpressed by the supposed challenge, you open up your favourite text editor (Vim, of course) and begin typing away... in assembly.

Input Specification

The first line will contain 3 space-separated integers, N $(1 \le N \le 100)$, P $(1 \le P \le 10^9)$, and M $(P < M \le 10^9 + 7)$.

Output Specification

The result of $N^P \mod M$.

Sample Input 1

2 5 11

Sample Output 1

10

Sample Input 2

9 100 1000000007

Sample Output 2

136318165

Note

To use libc in NASM, the first line of your program should be ; libc. For all others, it should be ; features: libc.