# A Math Contest P13 - Ways

Time limit: 1.0s Memory limit: 256M

There are N objects, and you need to choose M of them. Determine the number of ways to choose objects, where the order does not matter. Since this answer may be quite large, output this value modulo K.

#### **Constraints**

$$1 \leq M \leq N \leq 10^{18}$$

$$1 \leq K \leq 10^6$$

# **Input Specification**

The only line contains three space-separated integers, N, M and K.

# **Output Specification**

Output the number of unordered ways to choose M of the N objects, modulo K.

### **Sample Input**

5 3 111

### **Sample Output**

10