# Combinations

(Time Limit: 2 second)

**Problem Description**

Given 0<=k<=n, we want to compute C(n,k), i.e., the number of different ways to take k items from n different items. Since the number may be very large, you need only output C(n,k) mod P, where P is a given prime.

**Technical Specification**

* + The number of test cases is at most 10.
  + 0<=k<=n<1000000.
  + P is a positive 31-bit integers.

**Input Format**

The test file contains several test cases. Each line is a test case and contains three integers n, k, and P. There is a space between two consecutive integers.

**Output Format**

For each test case, output the result in one line.

**Example**

|  |  |
| --- | --- |
| **Sample Input:** | **Sample Output:** |
| 10 2 7  20 3 107 | 3  70 |