1687. Permutation

Total: 1238 Accepted: 566 Rating: 3.9/5.0(11 votes) 0 ▾

Time Limit: 1sec Memory Limit:32MB

Description

Permutation plays a very important role in Combinatorics.
For example, 1 2 3 4 5 and 1 3 5 4 2 are both 5-permutations.
As everyone's known, the number of n-permutations is n!.
According to their magnitude relatives, if we insert the symbols '<' or '>' between every pairs of consecutive numbers of a permutation, we can get the permutation with symbols.
For example, 1 2 3 4 5 can be changed to 1<2<3<4<5,
1 3 5 4 2 can be changed to 1<3<5>4>2.
Now it's your task to calculate the number of n-permutations with k '<' symbols.
Maybe you don't like large numbers, so you should just give the result mod 2007.

Input

Input may contain multiple test cases.
Each test case is a line contains two integers n and k.0<n<=100 and 0<=k<=100.
The input will terminated by EOF.

Output

The nonnegative integer result mod 2007 on a line.

Sample Input

Copy

```
5 2
```

Sample Output

Copy

```
66
```