Nelward's new job

You might recall Nelward was previously assigned the task of sorting numbered bowling balls. Since he has duly completed all of his assigned tasks, he has been given a new load of work: calculating the incorrectness of an array of bowling balls.

The way incorrectness is calculated is by finding all pairs of indices (i, j) (0 ≤ i, j < N) such that i < j and A[i] > A[j]: for example, the array [1, 5, 3, 2, 4] has an incorrectness of 4, due to the pairs of indices (1, 2), (1, 3), (1, 4) and (2, 3) that satisfy the above conditions.

However you will work alongside Nelward to do something different: given a length **N** (1 ≤ **N** ≤ 1000) and an incorrectness **C** (1 ≤ **C** ≤ 10000), you have been tasked with calculating the number of arrays of bowling balls (which are all numbered 1 to **N** where each number appears exactly once) of incorrectness **C**.

Return this number modulo 10^9 + 7.

Examples

Example 1

Input:

```
10 1
```

Output:

```
9
```

Example 2

Input:

```
4 3
```

Output:

```
6
```

Example 3

Input:

```
9 13
```

Output:

```
17957
```