634. Find the Derangement of An Array

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Difficulty:	Medium

In combinatorial mathematics, a derangement is a permutation of the elements of a set, such that no element appears in its original position.

There's originally an array consisting of `n` integers from 1 to `n` in ascending order, you need to find the number of derangement it can generate.

Also, since the answer may be very large, you should return the output mod $10^9 + 7$.

Example 1:

```
Input: 3
Output: 2
Explanation: The original array is [1,2,3]. The two derangements are [2,3,1] and [3,1,2].
```

Note:

`n` is in the range of [1, 10^6].