# **Semi-Ordered Permutation**

You are given a **0-indexed** permutation of n integers nums.

A permutation is called **semi-ordered** if the first number equals **1** and the last number equals **n**. You can perform the below operation as many times as you want until you make **nums** a **semi-ordered** permutation:

• Pick two adjacent elements in nums, then swap them.

Return the minimum number of operations to make nums a semi-ordered permutation.

A **permutation** is a sequence of integers from 1 to n of length n containing each number exactly once.

#### **Example 1:**

```
Input: nums = [2,1,4,3]
Output: 2
Explanation: We can make the permutation semi-ordered using these sequence of ope rations:
1 - swap i = 0 and j = 1. The permutation becomes [1,2,4,3].
2 - swap i = 2 and j = 3. The permutation becomes [1,2,3,4].
It can be proved that there is no sequence of less than two operations that make nums a semi-ordered permutation.
```

## **Example 2:**

```
Input: nums = [2,4,1,3]
Output: 3
Explanation: We can make the permutation semi-ordered using these sequence of ope rations:
1 - swap i = 1 and j = 2. The permutation becomes [2,1,4,3].
2 - swap i = 0 and j = 1. The permutation becomes [1,2,4,3].
3 - swap i = 2 and j = 3. The permutation becomes [1,2,3,4].
```

It can be proved that there is no sequence of less than three operations that mak e nums a semi-ordered permutation.

# Example 3:

```
Input: nums = [1,3,4,2,5]
Output: 0
Explanation: The permutation is already a semi-ordered permutation.
```

### **Constraints:**

```
• 2 <= nums.length == n <= 50
```

- 1 <= nums[i] <= 50
- nums is a permutation.