# 3018. Maximum Number of Removal Queries That Can Be Processed

## Description

You are given a **0-indexed** array nums and a **0-indexed** array queries.

You can do the following operation at the beginning at most once:

• Replace nums with a subsequence of nums.

We start processing queries in the given order; for each query, we do the following:

- If the first and the last element of nums is less than queries[i], the processing of queries ends.
- Otherwise, we choose either the first or the last element of nums if it is greater than or equal to queries[i], and we remove the chosen element from nums.

Return the maximum number of queries that can be processed by doing the operation optimally.

#### Example 1:

```
Input: nums = [1,2,3,4,5], queries = [1,2,3,4,6]
Output: 4
Explanation: We don't do any operation and process the queries as follows:
1- We choose and remove nums[0] since 1 <= 1, then nums becomes [2,3,4,5].
2- We choose and remove nums[0] since 2 <= 2, then nums becomes [3,4,5].
3- We choose and remove nums[0] since 3 <= 3, then nums becomes [4,5].
4- We choose and remove nums[0] since 4 <= 4, then nums becomes [5].
5- We can not choose any elements from nums since they are not greater than or equal to 5.
Hence, the answer is 4.
It can be shown that we can't process more than 4 queries.</pre>
```

### Example 2:

```
Input: nums = [2,3,2], queries = [2,2,3]
Output: 3
Explanation: We don't do any operation and process the queries as follows:
1- We choose and remove nums[0] since 2 <= 2, then nums becomes [3,2].
2- We choose and remove nums[1] since 2 <= 2, then nums becomes [3].
3- We choose and remove nums[0] since 3 <= 3, then nums becomes [].
Hence, the answer is 3.
It can be shown that we can't process more than 3 queries.</pre>
```

#### Example 3:

```
Input: nums = [3,4,3], queries = [4,3,2]
Output: 2
Explanation: First we replace nums with the subsequence of nums [4,3].
Then we can process the queries as follows:
1- We choose and remove nums[0] since 4 <= 4, then nums becomes [3].
2- We choose and remove nums[0] since 3 <= 3, then nums becomes [].
3- We can not process any more queries since nums is empty.
Hence, the answer is 2.
It can be shown that we can't process more than 2 queries.</pre>
```

#### **Constraints:**

- 1 <= nums.length <= 1000
- 1 <= queries.length <= 1000
- 1 <= nums[i], queries[i] <= 10 9