

# Problem 2091: Removing Minimum and Maximum From Array

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 55.91%

**Paid Only:** No

**Tags:** Array, Greedy

## Problem Description

You are given a **0-indexed** array of **distinct** integers `nums`.

There is an element in `nums` that has the **lowest** value and an element that has the **highest** value. We call them the **minimum** and **maximum** respectively. Your goal is to remove **both** these elements from the array.

A **deletion** is defined as either removing an element from the **front** of the array or removing an element from the **back** of the array.

Return **the minimum** number of deletions it would take to remove **both** the minimum and maximum element from the array.

**Example 1:**

**Input:** `nums = [2, 10, 7, 5, 4, 1, 8, 6]` **Output:** 5 **Explanation:** The minimum element in the array is `nums[5]`, which is 1. The maximum element in the array is `nums[1]`, which is 10. We can remove both the minimum and maximum by removing 2 elements from the front and 3 elements from the back. This results in  $2 + 3 = 5$  deletions, which is the minimum number possible.

**Example 2:**

**Input:** `nums = [0, -4, 19, 1, 8, -2, -3, 5]` **Output:** 3 **Explanation:** The minimum element in the array is `nums[1]`, which is -4. The maximum element in the array is `nums[2]`, which is 19. We can remove both the minimum and maximum by removing 3

elements from the front. This results in only 3 deletions, which is the minimum number possible.

**Example 3:**

**Input:** `nums = [101]` **Output:** `1` **Explanation:** There is only one element in the array, which makes it both the minimum and maximum element. We can remove it with 1 deletion.

**Constraints:**

`1 <= nums.length <= 105` `-105 <= nums[i] <= 105` The integers in `nums` are **distinct**.

## Code Snippets

### C++:

```
class Solution {
public:
    int minimumDeletions(vector<int>& nums) {

    }
};
```

### Java:

```
class Solution {
    public int minimumDeletions(int[] nums) {

    }
}
```

### Python3:

```
class Solution:
    def minimumDeletions(self, nums: List[int]) -> int:
```