1788. Maximize the Beauty of the Garden Premium

Hard | Topics | Companies | Hint

There is a garden of `n` flowers, and each flower has an integer beauty value. The flowers are arranged in a line. You are given an integer array `flowers` of size `n` and each `flowers[i]` represents the beauty of the i^{th} flower.

A garden is **valid** if it meets these conditions:

- The garden has at least two flowers.
- The first and the last flower of the garden have the same beauty value.

As the appointed gardener, you have the ability to **remove** any (possibly none) flowers from the garden. You want to remove flowers in a way that makes the remaining garden **valid**. The beauty of the garden is the sum of the beauty of all the remaining flowers.

Return the maximum possible beauty of some **valid** garden after you have removed any (possibly none) flowers.

Example 1:

```
Input: flowers = [1,2,3,1,2]
Output: 8
Explanation: You can produce the valid garden [2,3,1,2] to have a total beauty of 2 + 3 + 1 + 2 = 8.
```

Example 2:

```
Input: flowers = [100,1,1,-3,1]
Output: 3
Explanation: You can produce the valid garden [1,1,1] to have a total beauty of 1 + 1 + 1 = 3.
```

Example 3:

```
Input: flowers = [-1,-2,0,-1]
Output: -2
Explanation: You can produce the valid garden [-1,-1] to have a total beauty of -1 + -1 = -2.
```

Constraints:

- `2 <= flowers.length <= 10^5`
- `-10^4 <= flowers[i] <= 10^4`
- It is possible to create a valid garden by removing some (possibly none) flowers.

Seen this question in a real interview before? 1/5

Yes No

Accepted **2.4K** | Submissions **3.6K** | Acceptance Rate **65.4%**

Topics

Array Hash Table Greedy Prefix Sum

Companies

0 - 6 months

Amazon 2

Hint 1

Consider every possible beauty and its first and last index in flowers.

Hint 2

Remove all flowers with negative beauties within those indices.

Discussion (3)