3478. Choose K Elements With Maximum Sum

Solved

Medium Topics Hint

You are given two integer arrays, `nums1` and `nums2`, both of length `n`, along with a positive integer `k`.

For each index `i` from `0` to `n - 1`, perform the following:

- Find **all** indices `j` where `nums1[j]` is less than `nums1[i]`.
- Choose **at most** `k` values of `nums2[j]` at these indices to **maximize** the total sum.

Return an array `answer` of size `n`, where `answer[i]` represents the result for the corresponding index `i`.

Example 1:

> **Input:** nums1 = [4,2,1,5,3], nums2 = [10,20,30,40,50], k = 2
>
> **Output:** [80,30,0,80,50]
>
> **Explanation:**
>
> - For `i = 0`: Select the 2 largest values from `nums2` at indices `[1, 2, 4]` where `nums1[j] < nums1[0]`, resulting in `50 + 30 = 80`.
> - For `i = 1`: Select the 2 largest values from `nums2` at index `[2]` where `nums1[j] < nums1[1]`, resulting in 30.
> - For `i = 2`: No indices satisfy `nums1[j] < nums1[2]`, resulting in 0.
> - For `i = 3`: Select the 2 largest values from `nums2` at indices `[0, 1, 2, 4]` where `nums1[j] < nums1[3]`, resulting in `50 + 30 = 80`.
> - For `i = 4`: Select the 2 largest values from `nums2` at indices `[1, 2]` where `nums1[j] < nums1[4]`, resulting in `30 + 20 = 50`.

Example 2:

> **Input:** nums1 = [2,2,2,2], nums2 = [3,1,2,3], k = 1
>
> **Output:** [0,0,0,0]
>
> **Explanation:**
>
> Since all elements in `nums1` are equal, no indices satisfy the condition `nums1[j] < nums1[i]` for any `i`, resulting in 0 for all positions.

Constraints:

- `n == nums1.length == nums2.length`
- `1 <= n <= 10^5`
- `1 <= nums1[i], nums2[i] <= 10^6`
- `1 <= k <= n`

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

Yes No

Accepted 16.842 /53.5K | Acceptance Rate 31.5 %

Topics

Hint 1

Hint 2

Discussion (38)