

Find Indices With Index and Value Difference II

You are given a **0-indexed** integer array `nums` having length `n`, an integer `indexDifference`, and an integer `valueDifference`.

Your task is to find **two** indices `i` and `j`, both in the range `[0, n - 1]`, that satisfy the following conditions:

- $\text{abs}(i - j) \geq \text{indexDifference}$, and
- $\text{abs}(\text{nums}[i] - \text{nums}[j]) \geq \text{valueDifference}$

Return *an integer array* `answer`, where `answer = [i, j]` *if there are two such indices, and* `answer = [-1, -1]` *otherwise*. If there are multiple choices for the two indices, return *any of them*.

Note: `i` and `j` may be **equal**.

Example 1:

Input: `nums = [5,1,4,1]`, `indexDifference = 2`, `valueDifference = 4`

Output: `[0,3]`

Explanation: In this example, `i = 0` and `j = 3` can be selected.

$\text{abs}(0 - 3) \geq 2$ and $\text{abs}(\text{nums}[0] - \text{nums}[3]) \geq 4$.

Hence, a valid answer is `[0,3]`.

`[3,0]` is also a valid answer.

Example 2:

Input: `nums = [2,1]`, `indexDifference = 0`, `valueDifference = 0`

Output: `[0,0]`

Explanation: In this example, `i = 0` and `j = 0` can be selected.

$\text{abs}(0 - 0) \geq 0$ and $\text{abs}(\text{nums}[0] - \text{nums}[0]) \geq 0$.

Hence, a valid answer is `[0,0]`.

Other valid answers are `[0,1]`, `[1,0]`, and `[1,1]`.

Example 3:

Input: nums = [1,2,3], indexDifference = 2, valueDifference = 4

Output: [-1,-1]

Explanation: In this example, it can be shown that it is impossible to find two indices that satisfy both conditions.

Hence, [-1,-1] is returned.

Constraints:

- $1 \leq n == \text{nums.length} \leq 10^5$
- $0 \leq \text{nums}[i] \leq 10^9$
- $0 \leq \text{indexDifference} \leq 10^5$
- $0 \leq \text{valueDifference} \leq 10^9$