0

6919. Apply Operations to Make All Array Elements Equal to Zero

My Submissions (/contest/weekly-contest-353/problems/apply-operations-to-make-all-array-elements-equal-to-zero/submissions/)

Back to Contest (/contest/weekly-contest-353/)

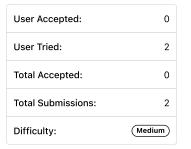
You are given a $\mathbf{0}$ -indexed integer array nums and a positive integer k.

You can apply the following operation on the array **any** number of times:

• Choose any subarray of size k from the array and decrease all its elements by 1.

Return true if you can make all the array elements equal to 0, or false otherwise.

A subarray is a contiguous non-empty part of an array.



Example 1:

```
Input: nums = [2,2,3,1,1,0], k = 3
Output: true
Explanation: We can do the following operations:
- Choose the subarray [2,2,3]. The resulting array will be nums = [1,1,2,1,1,0].
- Choose the subarray [2,1,1]. The resulting array will be nums = [1,1,\underline{1},\underline{0},\underline{0},\underline{0},0].
- Choose the subarray [1,1,1]. The resulting array will be nums = [\underline{0},\underline{0},\underline{0},0,0,0].
```

Example 2:

```
Input: nums = [1,3,1,1], k = 2
Output: false
Explanation: It is not possible to make all the array elements equal to 0.
```

Constraints:

- $1 \le k \le nums.length \le 10^5$
- $0 \le nums[i] \le 10^6$

```
JavaScript
                                                                                                                          ₽ 2 *
    const checkArray = (a, k) \Rightarrow \{
1 ▼
        let cur = 0;
3 •
        for (let i = 0; i < a.length; i++) {
4
             if (a[i] < cur) return false;</pre>
5
            a[i] -= cur;
6
            cur += a[i];
7
             if (i - k + 1 >= 0) cur -= a[i - k + 1];
8
9
        return cur ? false : true;
10
    };
```

Use Example Testcases

