644. Maximum Average Subarray II Premium

Hard Topics Companies

You are given an integer array `nums` consisting of `n` elements, and an integer `k`.

Find a contiguous subarray whose **length is greater than or equal to** `k` that has the maximum average value and return *this value*. Any answer with a calculation error less than 10^{-5} will be accepted.

Example 1:

```
Input: nums = [1,12,-5,-6,50,3], k = 4
Output: 12.75000
Explanation:
- When the length is 4, averages are [0.5, 12.75, 10.5] and the maximum average is 12.75
- When the length is 5, averages are [10.4, 10.8] and the maximum average is 10.8
- When the length is 6, averages are [9.16667] and the maximum average is 9.16667
The maximum average is when we choose a subarray of length 4 (i.e., the sub array [12, -5, -6, 50]) which has the max average 12.75, so we return 12.75
Note that we do not consider the subarrays of length < 4.
```

Example 2:

```
Input: nums = [5], k = 1
Output: 5.00000
```

Constraints:

- $n == nums.length$
- $1 <= k <= n <= 10^4$
- $-10^4 <= nums[i] <= 10^4$

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

Yes No

Accepted 21.1K | Submissions 57.1K | Acceptance Rate 37.0%

Topics

Array Binary Search Prefix Sum

Companies

0 - 6 months

Google 2

Similar Questions

Maximum Average Subarray I Easy

Discussion (4)