

# 644. Maximum Average Subarray II

## Description

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 <= 104`
- `-104 <= nums[i] <= 104`

