Given an array consisting of n integers, find the contiguous subarray whose **length is greater than or equal to k** that has the maximum average value. And you need to output the maximum average value.

## Example 1:

Input: [1, 12, -5, -6, 50, 3], k = 4

Output: 12.75

Explanation:

when length is 5, maximum average value is 10.8,

when length is 6, maximum average value is 9.16667.

Thus return 12.75.

## Note:

- 1. 1 <= k <= n <= 10.000.
- 2. Elements of the given array will be in range [-10,000, 10,000].
- 3. The answer with the calculation error less than 10<sup>-5</sup> will be accepted.

User Accepted: 128
User Tried: 671
Total Accepted: 131
Total Submissions: 1973
Difficulty: Hard