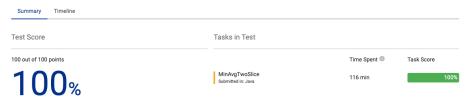


Candidate Report: Anonymous



TASKS DETAILS



Task description

A non-empty array A consisting of N integers is given. A pair of integers (P, Q), such that $0 \le P < Q < N$, is called a silce of array A (notice that the slice contains at least two elements). The average of a slice (P, Q) is the sum of A[P] + A[P+1] + ... + A[Q] divided by the length of the slice. To be precise, the average equals A[P] + A[P+1] + ... + A[Q] / (Q - P + 1).

For example, array A such that:

A[0] = 4 A[1] = 2 A[2] = 2 A[3] = 5 A[4] = 1 A[5] = 5 A[6] = 8

contains the following example slices:

- slice (1, 2), whose average is (2 + 2) / 2 = 2;
 slice (3, 4), whose average is (5 + 1) / 2 = 3;
 slice (1, 4), whose average is (2 + 2 + 5 + 1) / 4 = 2.5.

The goal is to find the starting position of a slice whose average is minimal.

Write a function:

```
class Solution { public int solution(int[] A); }
```

that, given a non-empty array A consisting of N integers, returns the starting position of the slice with the minimal average. If there is more than one slice with a minimal average, you should return the smallest starting position of such a slice.

A[0] = 4 A[1] = 2 A[2] = 2 A[3] = 5 A[4] = 1 A[5] = 5 A[6] = 8

the function should return 1, as explained above

Write an efficient algorithm for the following assumptions:

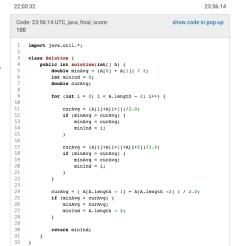
- N is an integer within the range [2..100,000];
 each element of array A is an integer within the range [-10,000..10,000].

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Solution







Analysis summary

The solution obtained perfect score.

Analysis 👩

Detected time complexity: O(N) example example test expand all ✓ OK double_quadruple ▶ simple2 ▶ medium_range increasing, decreasing (legth = ~100) and small functional expand all Performance tests ► large_ones numbers from -1 to 1, N = ~100,000 ✓ OK ► large_random random, N = ~100,000 ✓ OK extreme_values all maximal values, N = ~100,000 ✓ oĸ ▶ large_sequence many sequences, N = ~100,000 ✓ OK