You are given an array nums. You can rotate it by a non-negative integer k so that the array becomes [nums[k], nums[k + 1], ... nums[nums.length - 1], nums[0], nums[1], ..., nums[k-1]]. Afterward, any entries that are less than or equal to their index are worth one point.

* For example, if we have nums = [2,4,1,3,0], and we rotate by k = 2, it becomes [1,3,0,2,4]. This is worth 3 points because 1 > 0 [no points], 3 > 1 [no points], 0 <= 2 [one point], 2 <= 3 [one point], 4 <= 4 [one point].

Return *the rotation index*k*that corresponds to the highest score we can achieve if we rotated*nums*by it*. If there are multiple answers, return the smallest such index k.

**Example 1:**

**Input:** nums = [2,3,1,4,0]

**Output:** 3

**Explanation:** Scores for each k are listed below:

k = 0, nums = [2,3,1,4,0], score 2

k = 1, nums = [3,1,4,0,2], score 3

k = 2, nums = [1,4,0,2,3], score 3

k = 3, nums = [4,0,2,3,1], score 4

k = 4, nums = [0,2,3,1,4], score 3

So we should choose k = 3, which has the highest score.

**Example 2:**

**Input:** nums = [1,3,0,2,4]

**Output:** 0

**Explanation:** nums will always have 3 points no matter how it shifts.

So we will choose the smallest k, which is 0.

**Constraints:**

* 1 <= nums.length <= 105
* 0 <= nums[i] < nums.length