2488. Count Subarrays With Median K

Description

You are given an array `nums` of size `n` consisting of **distinct** integers from `1` to `n` and a positive integer `k`.

Return *the number of non-empty subarrays in* `nums` *that have a* ***median*** *equal to* `k`.

Note:

- The median of an array is the **middle** element after sorting the array in **ascending** order. If the array is of even length, the median is the **left** middle element.
  - For example, the median of `[2,3,1,4]` is `2`, and the median of `[8,4,3,5,1]` is `4`.
- A subarray is a contiguous part of an array.

Example 1:

```
Input: nums = [3,2,1,4,5], k = 4
Output: 3
Explanation: The subarrays that have a median equal to 4 are: [4], [4,5] and [1,4,5].
```

Example 2:

```
Input: nums = [2,3,1], k = 3
Output: 1
Explanation: [3] is the only subarray that has a median equal to 3.
```

Constraints:

- `n == nums.length`
- `1 <= n <= 10^5`
- `1 <= nums[i], k <= n`
- The integers in `nums` are distinct.