

795. Number of Subarrays with Bounded Maximum

Given an integer array `nums` and two integers `left` and `right`, return *the number of contiguous non-empty **subarrays** such that the value of the maximum array element in that subarray is in the range `[left, right]`*.

The test cases are generated so that the answer will fit in a **32-bit** integer.

Example 1:

Input: `nums = [2,1,4,3]`, `left = 2`, `right = 3`

Output: 3

Explanation: There are three subarrays that meet the requirements: `[2]`, `[2, 1]`, `[3]`.

Example 2:

Input: `nums = [2,9,2,5,6]`, `left = 2`, `right = 8`

Output: 7

Constraints:

- `1 <= nums.length <= 105`
- `0 <= nums[i] <= 109`
- `0 <= left <= right <= 109`

```
import sys
class Solution:
    def numSubarrayBoundedMax(self, nums: List[int], left: int, right:
int) -> int:
        ans = 0
        prev = 0
        i = 0
        j = 0
        n = len(nums)
        while i<n:
            if nums[i] in range(left,right+1):
                prev = i-j+1
                ans+=prev
            elif nums[i]<left:
```

```
        ans+=prev
    else:
        j = i+1
        prev = 0
        i = i+1
    return ans
```