# Number of subarrays with maximum values in given range

Given an array of N elements and L and R, print the number of sub-arrays such that the value of the maximum array element in that subarray is at least L and at most R.

**Example 1:**

```
Input : Arr[] = {2, 0, 11, 3, 0}
L = 1 and R = 10
Output : 4
Explanation:
The sub-arrays {2}, {2, 0}, {3} and {3, 0}
have maximum in range 1-10.
```

**Example 2:**

```
Input : Arr[] = {3, 4, 1}
L = 2 and R = 4
Output : 5
```

**Your Task:**
This is a function problem. The input is already taken care of by the driver code. You only need to complete the function **countSubarrays()** that takes an array **(arr)**, sizeOfArray **(n)**, element **L,** integer **R,** and return the number of subarray with the maximum in range L-R. The driver code takes care of the printing.

**Expected Time Complexity:** O(N).
**Expected Auxiliary Space:** O(1).

**Constraints:**
$1 \leq N \leq 10^5$
$1 \leq L \leq R \leq 10^6$