Suppose we fix the right end of the interval at r, where $1 \le r \le n$, so that the mode of the required interval $[l, r]$ is equal to $a[r]$.

Then, it is clear that the contribution of the remaining elements to the right is just equal to the number of values in the interval $[r + 1, n]$ equal to c.

But for the prefix $[1, r]$, we clearly need to find a separation at l, where $1 \le l \le r$, such that the total contribution from the interval $[1, l - 1]$ and $[l, r]$ is maximised.

For the interval $[l, r]$, its contribution to the answer will be equal to the frequency of the mode for that interval. The contribution of $[1, l - 1]$ is similar to that of $[r + 1, n]$, which is just the number of elements equal to c in that range. From this, it is clear that the best case arises when $a[r] = a[l]$; otherwise, the answer doesn' decrease when we shift l rightwards towards r.

Now, we define $\mathrm{ord}_k[i]$ for each $(1 \le i \le n), 0 \le k \le 5 \times 10^5$ as follows: the jth occurrence of $a[i]$ when going from left to right will be assigned a value of $\mathrm{ord}_{a[i]}[j]$ for each $1 \le i \le n$. Moreover, let $\mathrm{cnt}_c[i]$ denote the number of elements equal to c in the prefix $[1, i]$. Then, after fixing the value of r, the optimal value of l occurs at the place where

$$\mathrm{cnt}_c[l - 1] + \mathrm{ord}_{a[r]}[r] - \mathrm{ord}_{a[l]}[l] + 1$$

is maximised. But because r is fixed, and 1 is constant, we simply need to track down the largest value of $\mathrm{cnt}_c[l - 1] - \mathrm{ord}_{a[l]}[l]$ that has occurred so far.

The problem is now easy to solve by implementing the idea above.