DMOPC '15 Contest 6 P5 - A Classic Problem

Given an array with N elements, find the number of subarrays S such that $\max(S) - \min(S) \leq K$.

Input Specification

The first line will have space-separated N $(1 \le N \le 3 \times 10^6)$ and K $(0 \le K \le N)$. The second line will have the array, with each element being between 0 and N, inclusive.

Output Specification

Output the number of distinct subarrays that satisfy the condition. Two subarrays are different if they occupy a different range of elements, even if the elements themselves are the same.

Sample Input

5 2 0 3 2 1 4

Sample Output

8