

Beautiful Pairs

Lab Exam 2

Computer Programming
Date: 25 November, 2019

Problem Code: **P4 [20 Marks]**

Problem Statement: You are given array A of N elements and a special value K . A pair of elements (i, j) where $i < j$ is said to be beautiful if absolute difference of values present at i and j is at least K , i.e. $|A[i] - A[j]| \geq K$. Count the number of such beautiful pairs.

Input

First line of input is N and K , denoting the size of the array and the special value K . The next line has N space separated integers, denoting i^{th} element of the array.

Output

You should output a single integer denoting the total number of such beautiful pairs.

Constraints

$$1 \leq A[i], K \leq 10^9$$

Subtasks 1 (8 marks): $N \leq 10^3$

Subtasks 2 (12 marks): $N \leq 10^6$

Time Limit: 1 sec

Memory Limit: 256 MB

Sample Test Case

| Input | Output |
|--------------------|--------|
| 6 3 5 3 7 1 2 8 | 9 |