CCCHK '15 S1 - Finding number of pairs

Time limit: 0.1s

Memory limit: 256M

Java: 0.3s Python 2: 0.3s Python 3: 0.3s

Given a sequence of n integers $A[1], A[2], \ldots, A[n]$ and a nonnegative integer M, count the number of pairs (i, j) that satisfy the following two conditions: i < j, and $A[i] + A[j] \le M$.

Input Specification

- The first line contains integers n ($2 \le n \le 10^5$) and M ($0 \le M \le 10^9$), separated by a space.
- The second line contains n integers, which denotes $A[1], A[2], \ldots, A[n]$ $(0 \le A[i] \le 10^9)$.
- In 50% of the test cases, $n \le 1000$.

Output Specification

- The output contains an integer, which denotes the number of pairs that satisfy the two conditions.
- If the output is smaller than $10^9 + 7$, please keep it as is. Otherwise, output the number $mod 10^9 + 7$.

Sample Input 1

5 6 1 2 3 4 5

Sample Output 1

6

Sample Input 2

5 12 3 6 8 2 8

Sample Output 2

7

Explanation: In Sample 1, among the pairs, (1,2), (1,3), (1,4), (1,5), (2,3), (2,4) satisfy the conditions. In Sample 2, (1,2), (1,3), (1,4), (1,5), (2,4), (3,4), (4,5) satisfy the conditions.