Pair

1 second, 256 MB

You are given N integers:

$$X_1, X_2, \ldots, X_N,$$

such that $X_1 <= X_2 <= \ldots <= X_N$ (i.e., they are sorted).

You are also given two integers G and T. You want to find how many pairs of indices i and j such that $i < j$ and $X_i + X_j$ is close to G with additive error T, i.e.,

$$G - T <= X_i + X_j <= G + T.$$

Consider the following example where N = 10, and the integers are

10 12 15 20 21 24 24 26 29 30

and G = 45 and T = 0. In this case, you look for pairs of indices whose sum of values is exactly 45. The pairs of indices are 3 and 10 (15+30), 5 and 6 (21+24), and 5 and 7 (21+24); therefore the answer is 3.

Consider the case where we allow for error T = 3, i.e., you look for pairs whose values sum to 45 – 3 = 42 to 45 + 3 = 48. These are the pairs:

2 and 10 (12+30=42), 3 and 10 (15+30=45),
3 and 9 (15+29=46), 4 and 8 (20+26=46), 5 and 8 (21+26=47),
4 and 7 (20+24=44), 5 and 7 (21+24=45), 6 and 7 (24+24=48),
4 and 6 (20+24=44), and finally, 5 and 6 (21+24=45).

Thus the answer should be 10.

Input

The first line of input contains three integers N **G** and T (2 <= N <= 200,000; 0 <= G <= 500,000,000; 0 <= T <= 500,000,000).

The next N lines describe the integers, i.e., line 1+i contains X_i, for 1<=i<=N. (1 <= X_1 <= X_2 <=…<=X_N <= 200,000,000)

There are 30% of test cases where N <= 1,000.

There are another 30% of test cases where T = 0 and all X_i are distinct.

Output

The output contains one line, specifying the number of pairs. The output can be large, so do not forget to use type `long long`.

Example 1

Input	Output
10 45 0 10 12 15 20 21 24 24 26 29 30	3

(Other examples are on the next page.)

Example 2

Input	Output
10 45 3 10 12 15 20 21 24 24 26 29 30	10

Example 3

Input	Output
5 100 0 48 49 50 51 52	2

Example 4

Input	Output
5 100 0 50 50 50 50 50	10