Dance in Pairs

Problem Statement

There are N boys and N girls. Only a boy and a girl can form a dancing pair (i.e. no same sex dancing pairs are allowed). The only other condition in making pairs is that their absolute difference in height should be less than or equal to K.

Find the maximum number of pairs that can be formed so that everyone has a unique partner.

Input Format
The first line will contain two integers, N and K.
The second line will contain N integers, the heights of N boys.
The third line will contain N integers, the heights of N girls.

Constraints
$1 \leq N \leq 10^5$
$1 \leq K \leq 10^9$
$1 \leq \text{height of boy or girl} \leq 10^9$

Output Format
A single line containing the maximum number of possible pairs.

Sample Input

```
3 10
1 2 3
12 11 101
```

Sample Output

```
2
```

Explanation
$[1, 11]$ $[2, 12]$ are two possible pairs.