

Coconut Pairs

time limit per test: 1 second (1 second for Python)
memory limit per test: 976.6 megabytes
input: standard input
output: standard output
points: 100 · problem code: coconutpairs

You work at a coconut factory, and your job is to package coconuts into pairs for shipping. Two coconuts can be paired together if the absolute difference between their diameters is at most k . Each coconut can be used in at most one pair. Given the diameters of n coconuts, what is the maximum number of disjoint pairs you can form?

Input

The first line contains two integers n and k , the number of coconuts and the maximum allowed diameter difference for a valid pair.

The second line contains n integers, the diameters $d_1, d_2, \dots, d_n$ of the coconuts.

Output

A single integer: the maximum number of disjoint coconut pairs.

Constraints

- $1 \leq n \leq 10^5$
- $0 \leq k \leq 10^9$
- $1 \leq d_i \leq 10^9$

Example 1

Input

```
6 2
1 3 5 2 4 6
```

Output

```
3
```

Explanation

We can have 3 pairs of coconuts by pairing coconuts 1 and 2 (1,3), coconuts 3 and 6 (5,6), and coconuts 4 and 5 (2,4).

Example 2

Input

```
5 1
1 5 3 2 4
```

Output

```
2
```

Example 3

Input

```
7 0
1 3 1 2 2 5 4
```

Output

```
2
```