CPC '19 Contest 1 P2 - Luggage

Time limit: 1.0s **Memory limit:** 128M

Angie is going on vacation!

But she has too much stuff she wants to bring! She has N items, each with a height of h_i. However, her suitcase is quite special, it can fit as many items in it as she wants as long as they have a height range of K or less. The height range is the absolute difference between the maximum height of any item in the suitcase and the minimum height of any item in the suitcase.

Being a logical person, Angie wants to fit as many items in her suitcase as she can. Can you help her figure out how many?

Constraints

For all subtasks:

$1 \leq h_i, K \leq 10^9$

Subtask 1 [10%]

$1 \leq N \leq 20$

Subtask 2 [15%]

$1 \leq N \leq 2 \times 10^3$

Subtask 3 [75%]

$1 \leq N \leq 2 \times 10^5$

Input Specification

The first line contains the space separated integers N and K.

The second line of input contains N space separated integers $h_1, h_2, \ldots, h_N$.

Output Specification

Output the most amount of items Angie can bring in her suitcase.

Sample Input

```
5 3
25 9 1 6 8
```

Sample Output

```
3
```

Sample Explanation

She can bring items 2, 4, and 5 for a height range of 3.