Problem F. Devoxx Robocop

Input file: standard input
Output file: standard output
Time limit: 2 seconds

Every year, XHub organises Devoxx Morocco, the largest developers conference in MEA, where developers around the world can enjoy tech, sun, and Moroccan food.
Badr, who is the chairman of Devoxx Morocco and the founder of XHub, is known for his epic entrances in every year's opening ceremony.
This year, Badr bought a Robocop costume from El Kriaa, and wants to make the entrance wearing his new costume.

Badr's hotel room and the conference room are on a 2D plane, and Badr wants to get from his hotel room $(0, 0)$ to the conference room $(d, 0)$ by making multiple steps.
Wearing his Robocop costume, Badr can make a step from a point p_1 to another point p_2 on the plane, if the Euclidean distance between p_1 and p_2 is one of the n numbers $s_1, s_2, \ldots, s_n$ $(1 \le s_i \le 10^9)$ provided by Robocop costume's seller.
Note that Badr can move in any direction on the 2D plane.

Help Badr find the minimum number of steps needed to reach the conference room.

Input

The first line contains two integers n and d $(1 \le n \le 10^5,\ 1 \le d \le 10^9)$.
The second line contains n integers $s_1, s_2, \ldots, s_n$ $(1 \le s_i \le 10^9)$.

Output

Print the minimum number of steps to reach the conference room.

Example

Standard input	Standard output
3 12 3 4 5	3
2 10 15 4	2
2 4 1 3	2