Problem E. Strange Integers

Input file:	standard input
Output file:	standard output
Time limit:	1 second
Memory limit:	256 megabytes

Given n integers $A_1, A_2, \cdots, A_n$ and a parameter k, you should choose some integers $A_{b_1}, A_{b_2}, \cdots, A_{b_m}$ $(1 \le b_1 < b_2 < \cdots < b_m \le n)$ so that $\forall 1 \le i < j \le m, |A_{b_i} - A_{b_j}| \ge k$. Determine the maximum number of the integers you can choose.

Input

The first line contains two integers n, k $(1 \le n \le 10^5, 0 \le k \le 10^9)$, denoting the number of given integers and the given parameter.

The second line contains n integers $A_1, A_2, \cdots, A_n$ $(1 \le A_i \le 10^9)$, denoting the given integers.

Output

Output one line containing one integer, denoting the maximum number of the integers you can choose.

Example

standard input	standard output
11 2 3 1 4 1 5 9 2 6 5 3 5	4

Note

One possible scheme is to choose $\{A_3 = 4, A_6 = 9, A_7 = 2, A_8 = 6\}$.