

Problem K. Competition

Input file: *standard input*
Output file: *standard output*
Time limit: 1 second
Memory limit: 512 mebibytes

A wrestling competition will be held tomorrow. A total of n players will take part in it. The i -th player's strength is a_i .

If there is a match between the i -th player and the j -th player, the result will depend solely on $|a_i - a_j|$. If $|a_i - a_j| > K$, the player with the higher strength will win. Otherwise, each player will have a chance to win.

The competition rules are a little strange. For each fight, the referee will choose two players from all remaining players uniformly at random and hold a match between them. The loser will be eliminated. After $n - 1$ matches, the last remaining player will be the winner.

Given the numbers n and K and the array a , find how many players have a chance to win the competition.

Input

The first line of the input contains two integers n and K ($1 \leq n \leq 10^5$, $0 \leq K < 10^9$).

The second line contains n integers a_i ($1 \leq a_i \leq 10^9$).

Output

Print a single line with a single integer: the number of players which have a chance to win the competition.

Examples

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