

Call for Problems, Round 3

Problem ID: callforproblemsround3
Time limit: 1 second

The Call for Problems for the Pacific Northwest Regional has finished, and a number of problems were proposed. The judges voted on the difficulty of each problem. The Pacific Northwest Regional this year will feature some number of problems, and one of the goals is for no two problems to be too similar in difficulty.

Specifically, if two different problems have difficulty ratings d_i and d_j , then the difference between the two must be at least t .

Given the problems proposed, compute the maximum number of problems that can be put on the Pacific Northwest Regional.

Input

The first line contains two integers, n and t ($1 \leq n \leq 50, 1 \leq t \leq 2500$).

The next line contains n integers, the difficulties of the n problems proposed. Each difficulty will be between 1 and 2500.

Output

Output a single integer, the maximum number of problems that can be put on the Pacific Northwest Regional.

Sample Input 1	Sample Output 1
5 67 1 68 1 68 1	2
Sample Input 2	Sample Output 2
3 67 67 767 677	3
Sample Input 3	Sample Output 3
2 67 67 1	1