Problem L. KaChang!

Input file:	standard input
Output file:	standard output
Time limit:	1 second
Memory limit:	128 megabytes

Setting the time limit for algorithm competition questions is a very skillful task. If you set the time limit too tight, many people will scold you for being too demanding on details. On the other hand, if you set the time limit too loosely and allow an algorithm with unexpected time complexity to pass, then many people will scold you too.

When preparing problems, people usually set the time limit to at least twice the running time of the standard program, but sometimes contestants still feel that the time limit is too tight.

Now you have the standard program for a problem and another n programs considered "should pass the problem". Given the running time of each program, please find the smallest integer $k \geq 2$, so that when the time limit is set to k times the running time of the standard program, all the provided programs can pass. A program can pass if and only if its running time less or equal to the time limit.

Input

The first line contains two integers n, T ($1 \leq n, T \leq 10^5$), representing the number of provided programs (not include the standard program), and the running time of the standard program.

The second line contains n integers $t_1, t_2, \ldots, t_n$ ($1 \leq t_i \leq 10^9$) , representing the running time of the provided programs.

Output

Output a single integer greater or equal to 2, representing the minimin k which could guarantee that all the provided programs can pass.

Example

standard input	standard output
5 1000 998 244 353 1111 2333	3