B. Maximum Value

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

You are given a sequence a consisting of n integers. Find the maximum possible value of (integer remainder of a_i divided by a_j), where $1 \le i, j \le n$ and $a_i \ge a_j$.

Input

The first line contains integer n — the length of the sequence ($1 \le n \le 2 \cdot 10^5$).

The second line contains n space-separated integers a_i ($1 \le a_i \le 10^6$).

Output

Print the answer to the problem.

Examples

input
3 3 4 5

output
2