Task 1: `Area 2`

Ziv has n pairs of sticks, numbered from 1 to n. The i-th pair consists of two sticks, each of length $a[i]$.

Ziv intends to construct a rectangular frame by selecting two **distinct** indices x and y ($x \neq y$). The resulting rectangle will have side lengths $a[x]$ by $a[y]$, and an area equal to $a[x] \times a[y]$.

Help Ziv find the maximum possible area of a rectangular frame he can construct.

Input Format

Your program must read from standard input.

The first line of input contains one integer n.

The next n lines of input each contain one integer. The i-th of these lines contains $a[i]$.

Output Format

Your program must print to standard output.

Output one integer, the maximum possible area of a rectangular frame Ziv can form.

The output should contain only a single integer. Do not print any additional text such as `Enter a number` or `The answer is`.

Subtasks

For all test cases, the input will satisfy the following bounds:

- $2 \leq n \leq 10$
- $1 \leq a[i] \leq 1000$ for all $1 \leq i \leq n$

Your program will be tested on input instances that satisfy the following restrictions:

Subtask	Score	Additional Constraints
0	0	Sample test cases
1	20	$n = 2$
2	20	$n = 3$
3	60	No additional constraints

Sample Test Case 1

This test case is valid for subtasks 1 and 3.

Input	Output
2 8 9	72

Sample Test Case 1 Explanation

Only one frame is possible: 8×9 with an area of 72.

Sample Test Case 2

This test case is valid for subtasks 2 and 3.

Input	Output
3 16 44 18	792

Sample Test Case 2 Explanation

There are only 3 frames possible:

- $16 \times 44 = 704$
- $16 \times 18 = 288$
- $44 \times 18 = 792$

The largest area is 792.

Sample Test Case 3

This test case is valid for subtask 3.

Input	Output
8 6 7 6 7 99 99 69 1	9801