Largest even number

Given an array of n integers. Find the largest even number in the array.

Input

The first line contains the integer n (n <= 10^5).

The second line contains n integers a_i ($|a_i|$ <= 10^9 - denoted by | N | is the absolute value of N) are the numbers in the array.

Output

Output the largest even number in the array. If no even number is found, output -1.

Example

Input:
5
1 2 -3 -4 6

Output:
6

Input:
3
1 3 5

Output:
-1