

# F D05 - GCD Max

Problem

Submissions

Leaderboard

Discussions

Given an array  $a[N]$ , write a program that prints the maximum GCD (Greatest Common Divisor) of any subset of at least size 2 of the array.

GCD of two or more than two numbers is the biggest number that divides all of the given numbers.

## Input Format

First line contains a number  $N$ , size of the array. Next  $N$  lines contain one integer each.

## Constraints

$1 \leq N \leq 1000$   $1 \leq A[i] \leq 1000$

## Output Format

Print the maximum possible GCD of any subset of size at least 2 or print -1 if there is no such subset.

## Sample Input 0

```
7
6
12
24
3
15
36
10
```

## Sample Output 0

```
12
```

## Explanation 0

12 is the greatest GCD possible by considering the subset {12,24,36}.



Contest ends in a day

Submissions: 220


Max Score: 50

Difficulty: Medium

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C++14



```
1 #include <cmath>
2 #include <cstdio>
3 #include <vector>
4 #include <iostream>
5 #include <algorithm>
6 using namespace std;
7
```

```
8
9 ▼ int main() {
10 ▼   /* Enter your code here. Read input from STDIN. Print output to STDOUT */
11   return 0;
12 }
13
```

Line: 1 Col: 1

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