

# XN2NTQ - Judge Subtask 3, 4

[English](#)

[Vietnamese](#)

For a positive integer  $n$   $a_1, a_2, \dots, a_n$ , sought grouped satisfy the following conditions:

- Each number can only be placed in a group;
- Each group has exactly 2 and the total number of two numbers in each group is prime;
- The number of groups are classified as the most.

example: With 8 positive integers 1, 2, 3, 4, 5, 6, 7, 8 have a classified into 4 groups (1,4); (2,5); (3,8); (6,7);

## Input

- The first line contains an integer  $N$ .
- 2nd line contains  $N$  integers  $a_1, a_2, \dots, a_n$ . ( $a[i] \leq 10^6$ ).

## Output

- 1 single line group number to find the most

## Example

**Input:**

```
8
1 2 3 4 5 6 7 8
```

**Output:**

```
4
```

Subtask 1:  $n \leq 10$  [25 tests]

Subtask 2:  $n \leq 20$  [25 tests]

**Subtask 3:  $n \leq 1000$  [25 tests]**

**Subtask 4:  $n \leq 10^5$ , the numbers  $a_1, a_2, \dots, a_n$  is a permutation of 1, 2, ...  $n$  [25 tests]**

**Note: here judge subtask 3, 4! go to MTXN2NTQ to judge substack 1, 2.**

<http://www.spoj.com/problems/MTXN2NTQ/en/>