CODEFORCES β
Sponsored by Telegram

🇬🇧 🇷🇺
Enter | Register

HOME   CONTESTS   GYM   PROBLEMSET   GROUPS   RATING   API   CANADA CUP 🏆   SECTIONS

PROBLEMS   SUBMIT   STATUS   STANDINGS   CUSTOM TEST

A. Towers

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

Little Vasya has received a young builder's kit. The kit consists of several wooden bars, the lengths of all of them are known. The bars can be put one on the top of the other if their lengths are the same.

Vasya wants to construct the minimal number of towers from the bars. Help Vasya to use the bars in the best way possible.

Input

The first line contains an integer N ($1 \le N \le 1000$) — the number of bars at Vasya's disposal. The second line contains N space-separated integers l_i — the lengths of the bars. All the lengths are natural numbers not exceeding 1000.

Output

In one line output two numbers — the height of the largest tower and their total number. Remember that Vasya should use all the bars.

Examples

input
3 1 2 3
output
1 3

input
4 6 5 6 7
output
2 3

Codeforces Beta Round #37

Finished

→ **Virtual participation**

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

[Start virtual contest]

→ **Problem tags**

[sortings]   No tag edit access

→ **Contest materials**

- Announcement   ✕
- Tutorial   ✕