A. Reconnaissance 2

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

n soldiers stand in a circle. For each soldier his height a_i is known. A reconnaissance unit can be made of such two **neighbouring** soldiers, whose heights difference is minimal, i.e. $|a_i - a_j|$ is minimal. So each of them will be less noticeable with the other. Output any pair of soldiers that can form a reconnaissance unit.

Input

The first line contains integer n $(2 \le n \le 100)$ — amount of soldiers. Then follow the heights of the soldiers in their order in the circle — n space-separated integers $a_1, a_2, \ldots, a_n$ $(1 \le a_i \le 1000)$. The soldier heights are given in clockwise or counterclockwise direction.

Output

Output two integers — indexes of **neighbouring** soldiers, who should form a reconnaissance unit. If there are many optimum solutions, output any of them. Remember, that the soldiers stand in a circle.

Examples

input
5 10 12 13 15 10
output
5 1

input
4 10 20 30 40
output
1 2

→ Attention

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

Codeforces Beta Round #34 (Div. 2)

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

implementation

No tag edit access

→ Contest materials

- Announcement