C. Unordered Subsequence

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

output: standard output

The sequence is called <u>ordered</u> if it is non-decreasing or non-increasing. For example, sequence [3, 1, 1, 0] and [1, 2, 3, 100] are ordered, but the sequence [1, 3, 3, 1] is not. You are given a sequence of numbers. You are to find it's shortest subsequence which is not ordered.

A subsequence is a sequence that can be derived from the given sequence by deleting zero or more elements without changing the order of the remaining elements.

Input

The first line of the input contains one integer n ($1 \le n \le 10^5$). The second line contains n space-separated integers — the given sequence. All numbers in this sequence do not exceed 10^6 by absolute value.

Output

If the given sequence does not contain any unordered subsequences, output 0. Otherwise, output the length k of the shortest such subsequence. Then output k integers from the range [1..n] — indexes of the elements of this subsequence. If there are several solutions, output any of them.

Examples

```
input

5
67 499 600 42 23

output

3
1 3 5
```

```
input
3
1 2 3
output
0
```