Greatest Common Increasing Subsequence

https://vjudge.net/problem/zoj-2432

You are given two sequences of integer numbers. Write a program to determine their common increasing subsequence of maximal
possible length.

Sequence S1, S2, ..., SN of length N is called an increasing subsequence of a sequence A1, A2, ..., AM of length M if there exist 1 <= i1 < i2 < ...< iN <= M such that Sj = Aij for all 1 <= j <= N, and Sj < Sj+1 for all 1 <= j < N.

Input

Each sequence is described with M - its length (1 <= M <= 500) and M integer numbers Ai (-2^31 <= Ai < 2^31) - the sequence itself.

Output

On the first line of the output print L - the length of the greatest common increasing subsequence of both sequences. On the second line print the subsequence itself. If there are several possible answers, output any of them.

This problem contains multiple test cases!

The first line of a multiple input is an integer N, then a blank line followed by N input blocks. Each input block is in the format indicated in the problem description. There is a blank line between input blocks.

The output format consists of N output blocks. There is a blank line between output blocks.

Sample Input

```
1

5
1 4 2 5 -12
4
-12 1 2 4
```

Sample Output

```
2
1 4
```