



HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

D. LCIS

time limit per test: 1 second memory limit per test: 256 megabytes

This problem differs from one which was on the online contest.

The sequence $a_1, a_2, ..., a_n$ is called increasing, if $a_i \le a_{i+1}$ for $i \le n$.

The sequence $s_1, s_2, ..., s_k$ is called the subsequence of the sequence $a_1, a_2, ..., a_n$, if there exist such a set of indexes $1 \le i_1 < i_2 < ... < i_k \le n$ that $a_{i_j} = s_j$. In other words, the sequence s can be derived from the sequence s by crossing out some elements.

You are given two sequences of integer numbers. You are to find their longest common increasing subsequence, i.e. an increasing sequence of maximum length that is the subsequence of both sequences.

Input

The first line contains an integer n ($1 \le n \le 500$) — the length of the first sequence. The second line contains n space-separated integers from the range $[0,10^9]$ — elements of the first sequence. The third line contains an integer m ($1 \le m \le 500$) — the length of the second sequence. The fourth line contains m space-separated integers from the range $[0,10^9]$ — elements of the second sequence.

Output

In the first line output k — the length of the longest common increasing subsequence. In the second line output the subsequence itself. Separate the elements with a space. If there are several solutions, output any.

Examples



input	Сору
5	
1 2 0 2 1	
3	
1 0 1	
output	Сору
2	
0 1	

Finished Practice

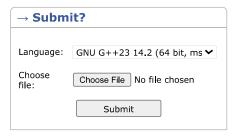
\$

→ 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 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





→ Last submissions		
Submission	Time	Verdict
<u>325266094</u>	Jun/20/2025 13:56	Accepted





The only programming contests Web 2.0 platform Server time: Jun/20/2025 17:57:44^{UTC+7} (k1).

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