



HOME TOP CONTESTS GYM PROBLEMSET GROUPS RATING API HELP DASHA W CALENDAR

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS STANDINGS CUSTOM INVOCATION

B. Shooting

time limit per test: 1 second memory limit per test: 256 megabytes input: standard input output: standard output

Recently Vasya decided to improve his pistol shooting skills. Today his coach offered him the following exercise. He placed n cans in a row on a table. Cans are numbered from left to right from 1 to n. Vasya has to knock down each can exactly once to finish the exercise. He is allowed to choose **the order** in which he will knock the cans down.

Vasya knows that the *durability* of the i-th can is a_i . It means that if Vasya has already knocked x cans down and is now about to start shooting the i-th one, he will need $(a_i \cdot x + 1)$ shots to knock it down. You can assume that if Vasya starts shooting the i-th can, he will be shooting it until he knocks it down.

Your task is to choose such an order of shooting so that the number of shots required to knock each of the n given cans down exactly once is minimum possible.

Input

The first line of the input contains one integer n $(2 \le n \le 1000)$ — the number of cans.

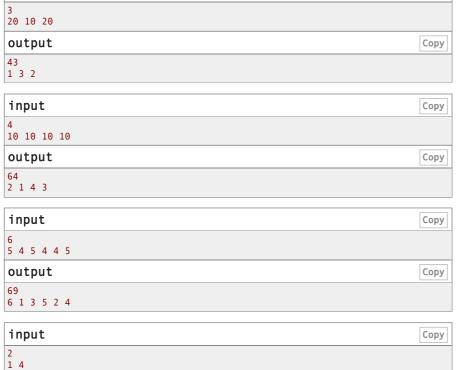
The second line of the input contains the sequence a_1, a_2, \ldots, a_n $(1 \le a_i \le 1000)$, where a_i is the durability of the i-th can.

Output

In the first line print the minimum number of shots required to knock each of the n given cans down exactly once.

In the second line print the sequence consisting of n distinct integers from 1 to n — the order of indices of cans that minimizes the number of shots required. If there are several answers, you can print any of them.

Examples input





→ 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

→ Practice

Copy

You are registered for practice. You can solve problems unofficially. Results can be found in the contest status and in the bottom of standings.

→ Clone Contest to Mashup

You can clone this contest to a mashup.

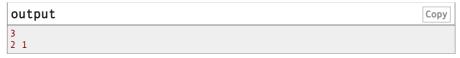
Clone Contest





→ Contest materials	
 Announcement #1 (en) 	×
Announcement #2 (ru)	×
• Tutorial #1 (en)	×
Tutorial #2 (ru)	×

2019/9/24 Problem - B - Codeforces



Note

In the first example Vasya can start shooting from the first can. He knocks it down with the first shot because he haven't knocked any other cans down before. After that he has to shoot the third can. To knock it down he shoots $20 \cdot 1 + 1 = 21$ times. After that only second can remains. To knock it down Vasya shoots $10 \cdot 2 + 1 = 21$ times. So the total number of shots is 1 + 21 + 21 = 43.

In the second example the order of shooting does not matter because all cans have the same durability.

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