# Problem H. Frog

It's a sunshiny beautiful day. Danny the Frog Hunter, invited you to play a new game. The game board consists of $n$ cells in a straight line, numbered from 1 to $n$. Each cell contains a number $a_i$ such that $1 \le a_i \le n$ and $a_i \ne a_j$ for each $i \ne j$.

A Frog is placed in one of the cells. They take alternating turns moving the Frog around the board, with Danny moving first. The current player can move from cell $i$ to cell $j$ only if the following two conditions are satisfied:

- the number in the new cell $j$ must be strictly larger than the number in the old cell $i$ ($a_j > a_i$)
- the distance that the Frog travels during this turn must be a multiple of the number in the old cell ($|i - j| \mod a_i = 0$)

Whoever is unable to make a move, loses. both players play optimally. It can be shown that there always is a winning strategy for one of the players.

Determine the starting positions that lead you to win the game if you play optimally.

## Input

The first line contains a single integer $n$ ($1 \le n \le 10^5$) — the number of numbers.

The second line contains $n$ integers $a_1, a_2, \ldots, a_n$ ($1 \le a_i \le n$) such that $a_i \ne a_j$ for each $i \ne j$.

## Output

In the first line print $x$ - the number of starting positions that lead you to win the game.

In the second line print $x$ integers ascending - the starting positions that lead you to win the game.

## Examples

| test | answer |
|---|---|
| 6<br>2 4 1 6 3 5 | 3<br>1 2 4 |
| 12<br>5 6 3 10 9 12 1 8 4 11 2 7 | 7<br>1 2 3 4 5 6 7 |

## Explanations

In the first sample, if Danny puts the Frog on the number (**not position**):

1: You can move the Frog to any number and win by picking the 6 after.

2: You should move the Frog to 3. Danny moves it to 4. You move it to the 5 and there is no choice for Danny now. Note that in this case, all moves were forcible.

4: You move it to the 5 and there is no choice for Danny now.