

Pattern Sequence

Input File: pattern.txt

You have created a survey that asks 20 participants to rate their level of happiness in school from 0 to 10. Your goal is to find the longest recurring pattern of values from the sequence of 20 values given by the participants. Your requirements for a recurring pattern is that the pattern of numbers occurs at least twice in sequence of 20 values. Given the sequence of 20 numbers, find how many numbers is in the longest recurring pattern.

Input:

The first line represents the number of lines to follow. Each line contains the sequence of 20 values, ranging from 0 to 10, including a space separating each value.

Output:

Output the longest recurring pattern followed by an integer that represents the length of the longest recurring pattern on the next line in the input of 20 values, with a space separating each value.

Example Input:

```
2
4 5 2 4 5 4 3 9 10 3 2 6 2 7 6 9 4 5 2 4
10 10 10 3 2 1 9 1 2 0 9 2 10 10 10 3 2 1 9 6
```

Example Output:

```
4 5 2 4
4
10 10 10 3 2 1 9
7
```