

Trivial Training Problem

The task

You are given a list L of integer values. Print, in ascending order, a list of all duplicate values in L . Each value in the output should appear only once.

Input

The input contains a single line with a list of integers separated by spaces.

There are at least 2 and at most 1000 values in the input. All values are positive and do not exceed 1000.

Output

The output consists of one text line containing a list of duplicates in the input list.

The output values are separated by spaces and they are printed in ascending order.

The output list is guaranteed to be unempty.

Example 1

Input

1 2 2 3 3 3

Output

2 3

Example 2

Input

60 50 40 30 20 10 0 0 10 20 30 40

Output

0 10 20 30 40

Example 3

Input

4 4 4 4 4 4 2 4 4 4

Output

4

Public data

The public data set is intended for easier debugging and approximate program correctness checking. The public data set is stored also in the upload system and each time a student submits a solution it is run on the public dataset and the program output to stdout and stderr is available to him/her.

[Link to public data set](#)