[PI010] - Collection Sorting

You are going through your old collection of football player stickers. You notice that you have a lot of repeated ones, so you decide to clean them up.

Task

You are given a sequence of numbers. Remove the duplicated elements. Print them in the order the first of them appears in the input.

Input

You will receive two lines as input.

In the first line, you will receive an integer n (1 <= n <= 100'000), corresponding to the number of elements in the sequence.

In the second line, you will receive n integers a_1, a_2, ..., a_n (1 <= a_i <= 100'000), separated by spaces.

Output

Print the given sequence in the same order but with no duplicate elements (this sequence is smaller or equal to n, the size of the initial sequence).

Example 1

Input

```
6
1 2 1 3 2 3
```

Output

```
1 2 3
```

Example 2

Input

```
6
8 7 2 4 2 8
```

Output

```
8 7 2 4
```

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