Hotel Room

The hotel manager wants to assign the room to the customer. The hotel has N rooms, and each room numbered with 1 to N. Now all rooms are available. The manager wants assign the room according to the following rules.

1. Each customer gives the room number they wish to stay in
2. If the room is available, manager can assign the room
3. If the room is already assigned, the manager can assign the room with the lowest number among the available rooms and also with a larger number than the desired room

Input:
> The first line contains one positive integer N which is total number of rooms
> The second line, list of customers' desired room numbers with space-separated

Output:
> Print, list of room numbers that assigned to customer with space-separated

Sample:

No.	Sample Input	Sample Output
1	10 1 3 4 1 3 1	1 3 4 2 5 6
2	20 3 5 2 1 7 19 2 6 7 8 15 16 19 14	3 5 2 1 7 19 4 6 8 9 15 16 20 14