Array_Level2_005

Given an array of integers, sort the array according to frequency of elements. For example, if the input array is {2, 3, 2, 4, 5, 12, 2, 3, 3, 3, 12}, then modify the array to {3, 3, 3, 3, 2, 2, 2, 12, 12, 4, 5}.

Input Format

Input contains the no of elements and array values

Constraints

 $1 \le \text{array_size} \le 10000$

Output Format

print the altered array

Sample Input 0

17 3 2 4 6 2 4 3 3 4 5 6 3 2 4 5 5 3

Sample Output 0

3 3 3 3 3 4 4 4 4 2 2 2 5 5 5 6 6