18. 11462 - Age Sort

Time limit: don't know

You are given the ages (in years) of all people of a country with at least 1 year of age. You know that no individual in that country lives for 100 or more years. Now, you are given a very simple task of sorting all the ages in ascending order.

Input

There are multiple test cases in the input file. Each case starts with an integer \mathbf{n} (0< \mathbf{n} <=2000000), the total number of people. In the next line, there are \mathbf{n} integers indicating the ages. Input is terminated with a case where \mathbf{n} = 0. This case should not be processed.

Output

For each case, print a line with **n** space separated integers. These integers are the ages of that country sorted in ascending order.

Warning: Input Data is pretty big (~ 25 MB) so use faster IO.

Sample Input

Output for Sample Input

5	1 2 3 4 5
3 4 2 1 5	1 2 2 3 3
5	
2 3 2 3 1	
0	

Note: The memory limit of this problem is 2 Megabyte Only.

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