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 $n(0<n \leq 2000000)$, the total number of people. In the next line, there are $n$ integers indicating the ages. Input is terminated with a case where $n=0$. 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 ( $\sim 25 \mathrm{MB}$ ) so use faster IO.

## Sample Input

5
34215
5
23231
0

## Sample Output

12345
12233

