

Big Sorting



Consider an array of numeric strings where each string is a positive number with anywhere from 1 to 10^6 digits. Sort the array's elements in *non-decreasing*, or ascending order of their integer values and print each element of the sorted array on a new line.

Function Description

Complete the *bigSorting* function in the editor below. It should return the sorted string array.

bigSorting has the following parameter(s):

- *unsorted*: an unsorted array of integers as strings

Input Format

The first line contains an integer, *n*, denoting the number of strings in *unsorted*.
Each of the *n* subsequent lines contains an integer string *unsorted[i]*.

Constraints

- $1 \leq n \leq 2 \times 10^5$
- Each string is guaranteed to represent a positive integer without leading zeros.
- The total number of digits across all strings in *unsorted* is between 1 and 10^6 (inclusive).

Output Format

Print each element of the sorted array on a new line.

Sample Input 0

```
6
31415926535897932384626433832795
1
3
10
3
5
```

Sample Output 0

```
1
3
3
5
10
31415926535897932384626433832795
```

Explanation 0

The initial array of strings is *unsorted* = [31415926535897932384626433832795, 1, 3, 10, 3, 5]. When we order each string by the real-world integer value it represents, we get:

$$1 \leq 3 \leq 3 \leq 5 \leq 10 \leq 31415926535897932384626433832795$$

We then print each value on a new line, from smallest to largest.

Sample Input 1

```
8
```

```
1
2
100
12303479849857341718340192371
3084193741082937
3084193741082938
111
200
```

Sample Output 1

```
1
2
100
111
200
3084193741082937
3084193741082938
12303479849857341718340192371
```