# **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 return the sorted array.

## **Example**

```
unsorted = ['1', '200', '150', '3']
```

Return the array ['1', '3', '150', '200'].

#### **Function Description**

Complete the bigSorting function in the editor below.

bigSorting has the following parameter(s):

• string unsorted[n]: an unsorted array of integers as strings

#### Returns

• string[n]: the array sorted in numerical order

#### **Input Format**

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

#### **Constraints**

- $1 < n < 2 \times 10^5$
- Each string is guaranteed to represent a positive integer.
- There will be no leading zeros.
- ullet The total number of digits across all strings in unsorted is between 1 and  $10^6$  (inclusive).

# 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
```