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Test Name: Mock Test

Taken On: 6 Jul 2022 20:50:37 IST

Time Taken: 7 min 5 sec/ 30 min

Invited by: Ankush

Invited on: 6 Jul 2022 20:50:20 IST

Skills Score:

Tags Score:

- Algorithms 95/95
- Arrays 95/95
- Core CS 95/95
- Data Structures 95/95
- Easy 95/95
- Sorting 95/95
- Strings 95/95
- problem-solving 95/95

100%

95/95

scored in **Mock Test** in 7 min 5 sec on 6 Jul 2022 20:50:37 IST

Recruiter/Team Comments:

No Comments.

	Question Description	Time Taken	Score	Status
Q1	Big Sorting > Coding	6 min 55 sec	95/ 95	✓

QUESTION 1

Correct Answer

Score 95

Big Sorting > Coding

SortingStringsAlgorithmsEasyData StructuresArrays

problem-solvingCore CS

QUESTION DESCRIPTION

Consider an array of numeric strings where each string is a positive number with anywhere from **1** to **10<sup>6</sup>** 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

- $1 \leq n \leq 2 \times 10^5$
- Each string is guaranteed to represent a positive integer.
- There will be no leading zeros.
- 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
```

## CANDIDATE ANSWER

Language used: **Java 8**

```
1  class Result {
2
3      /*
4       * Complete the 'bigSorting' function below.
5       *
6       * The function is expected to return a STRING_ARRAY.
7       * The function accepts STRING_ARRAY unsorted as parameter.
8       */
9
10     public static List<String> bigSorting(List<String> unsorted) {
11
12         Map<Integer,List<String>> arrangePerLength = new TreeMap<>();
13
14         for(String s: unsorted){
15             int len = s.length();
16             if(!arrangePerLength.containsKey(len)){
17                 arrangePerLength.put(len, new ArrayList<>());
18             }
19             arrangePerLength.get(len).add(s);
20         }
21
22         List<String> result = new ArrayList<>();
23         for(List<String> toSort : arrangePerLength.values()){
24             Collections.sort(toSort);
25             result.addAll(toSort);
26         }
27
28         return result;
29     }
30 }
31
32
33
34
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	✔ Success	0	0.1485 sec	29.9 KB
Testcase 2	Medium	Hidden case	✔ Success	10	0.1997 sec	30 KB
Testcase 3	Medium	Hidden case	✔ Success	10	0.2664 sec	40.6 KB
Testcase 4	Hard	Hidden case	✔ Success	15	0.2404 sec	47.3 KB
Testcase 5	Hard	Hidden case	✔ Success	15	0.3376 sec	46.3 KB
Testcase 6	Hard	Hidden case	✔ Success	15	0.2493 sec	45.1 KB
Testcase 7	Hard	Hidden case	✔ Success	15	0.3723 sec	48 KB
Testcase 8	Hard	Hidden case	✔ Success	15	0.5228 sec	69.9 KB
Testcase 9	Easy	Sample case	✔ Success	0	0.1935 sec	30.1 KB

No Comments

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