

Java's `BigDecimal` class can handle arbitrary-precision signed decimal numbers. Let's test your knowledge of them!

Given an array, s , of n real number strings, sort them in descending order — but wait, there's more! Each number must be printed in the exact same format as it was read from stdin, meaning that `.1` is printed as `.1`, and `0.1` is printed as `0.1`. If two numbers represent numerically equivalent values (e.g., $.1 \equiv 0.1$), then they must be listed in the same order as they were received as input).

Complete the code in the unlocked section of the editor below. You must rearrange array s 's elements according to the instructions above.

Input Format

The first line consists of a single integer, n , denoting the number of integer strings. Each line i of the n subsequent lines contains a real number denoting the value of s_i .

Constraints

- $1 \leq n \leq 200$
- Each s_i has *at most* **300** digits.

Output Format

Locked stub code in the editor will print the contents of array s to stdout. You are only responsible for reordering the array's elements.

Sample Input

```
9
-100
50
0
56.6
90
0.12
.12
02.34
000.000
```

Sample Output

```
90
56.6
50
02.34
0.12
.12
0
```

```
000.000
```

```
-100
```