COCI '10 Contest 2 #2 Napor

Time limit: 1.0s **Memory limit:** 32M

Little Mirko wasn't paying attention in math class, so the teacher has decided to give him a tedious assignment to solve during the weekend.

The teacher has given him a text consisting of N lines, containing only digits and lowercase letters of the English alphabet. Mirko has to find all numbers in the text and print them out in a **nondecreasing sequence**. He also has to **omit** any **leading zeros** that the numbers may have in the text.

The numbers can be uniquely determined by scanning through the text and always taking the largest possible number, i.e. delimited only by letters or line beginnings/ends. For example, the solution of `01a2b3456cde478` is 1, 2, 478, 3456.

Since Mirko is as slow as the snail from the previous task, he has asked you to write him a program to quickly solve his assignment, so that he can go play with Slavko as soon as possible.

Input Specification

The first line of input contains the integer N $(1 \leq N \leq 100)$, the number of lines of the text.

The next N lines contain the text, consisting exclusively of lowercase English letters and decimal digits.

Each line of the text is at most 100 characters long.

Output Specification

The output must contain M lines, where M is the number of numbers found in the provided text. Each line must contain a single number from the text. The numbers must be arranged in a nondecreasing sequence.

Note: The test data will ensure that M will never exceed 500.

Sample Input 1

```
2
lo3za4
01
```

Sample Output 1

```
1
3
4
```

Sample Input 2

```
4
43silos0
zita002
le2sim
231233
```

Sample Output 2

```
0
2
2
43
231233
```

Sample Input 3

```
4
01bond
02james007
03bond
04austinpowers000
```

Sample Output 3

```
0
1
2
3
4
7
```