



(/en/),
v1.1.0

CSD Testing System

(/en/),

Form the greatest number from the set of digits

Cost: 10 | Solved: 94

Memory limit: 64 MBs

Time limit: 1 s

Input: standard input

Output: standard output

Task:

Vasya wrote a large number on a long slip of paper and was ready to boast about it to his elder brother, Petya. But just as soon as he left the room to call his brother, his evil sister Katya ran into and cut the paper into several parts. As a result, there were one or several digits on each part.

Now Vasya can't remember which number he wrote. He only remembers that it was very large! To console the younger brother, Petya decided to find out what maximal number could be written on the slip of paper before it was cut. Help him!

Input:

The first line contains a natural n ($1 \leq n \leq 1000$) – the quantity of pieces.

The next n lines contain from 1 to 100 digits each. It is guaranteed that at least one line doesn't start with 0.

Output:

The maximal number that could be written before the paper was cut.

Example:

Input	Output
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4 2 20 004 66	66220004
1 3	3