\mathbf{D}

Largest Subsequence

A subsequence of a string \mathbf{x} can be made by erasing some (possibly all or none) of the letters in \mathbf{x} .

For example, "opt" is a subsequence of "computer", while "rt" is not.

Now, we want to find the **lexicographical** largest subsequence from a given string.

For example, the sorted subsequences of "test" are:

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"" (empty string), "e", "es", "est", "et", "s", "st", "t", "te", "tes", "test", "tet", "tst" and "tt".
```

And "tt" is the largest subsequences here, so print it out.

Input

On the first line of input, there is an integer N, representing the number of test cases.

The next N line, there is a string \mathbf{x} . the length of \mathbf{x} is between 1 and 52. Only lowercase characters appear in \mathbf{x} .

Output

For each test case, output the largest subsequence on each line.

Sample Input

Output for Sample Input

4	tt
test	a
a	un
bun yukkurishiteittene	yuutttne