## Bigger is Greater

Lexicographical order is often known as alphabetical order when dealing with strings. A string is greater than another string if it comes later in a lexicographically sorted list.

Given a word, create a new word by swapping some or all of its characters. This new word must meet two criteria:

- It must be greater than the original word
- It must be the smallest word that meets the first condition


## Example

$w=\mathrm{abcd}$
The next largest word is abdc.
Complete the function biggerIsGreater below to create and return the new string meeting the criteria. If it is not possible, return no answer.

## Function Description

Complete the biggerIsGreater function in the editor below.
biggerIsGreater has the following parameter(s):

- string w: a word


## Returns

- string: the smallest lexicographically higher string possible or no answer


## Input Format

The first line of input contains $T$, the number of test cases.
Each of the next $T$ lines contains $w$.

## Constraints

- $1 \leq T \leq 10^{5}$
- $1 \leq$ lengthof $w \leq 100$
- $w$ will contain only letters in the range ascii[a..z].


## Sample Input 0

5
ab
bb
hefg
dhck
dkhc

## Sample Output 0

ba
no answer
hegf
dhkc
hcdk

## Explanation 0

- Test case 1:
ba is the only string which can be made by rearranging ab. It is greater.
- Test case 2:

It is not possible to rearrange bb and get a greater string.

- Test case 3:
hegf is the next string greater than hefg.
- Test case 4:
dhkc is the next string greater than dhck.
- Test case 5.
hcdk is the next string greater than dkhc.


## Sample Input 1

6
lmno
dcba
dcbb
abdc
abcd
fedcbabcd

## Sample Output 1

lmon
no answer
no answer
acbd
abdc
fedcbabdc

