**Next Greatest Word**

After looking at a dictionary, Adam needs help thinking about what the next possible word could be given another word. Do you think you can calculate what the next word in a dictionary would be? If there is no other word possible, then return “no answer”

**Input:** The first line of input contains **T**, the number of test cases. The next **T** lines each contain one word.

**Output:** You will first output “CASE #(Case number):” followed by the output as shown below. You will then output the next word that would follow in lexicographical order. If there is no solution, output “no answer” instead.

**Example Input:**

5

ab

bb

hefg

dhck

dkhc

**Example Output:**

CASE #1: ba

CASE #2: no answer

CASE #3: hegf

CASE #4: dhkc

CASE #5: hcdk