Problem

You are given a string **S** and an integer **Q**. You are allowed to perform **at most** *Q* operations on the string. In one operation, you can change any **vowel** to it's next character (e.g., 'a'->'b', 'e'->'f', 'i'->'j', 'o'->'p', 'u'->'v'). Generate the lexicographically greatest string by performing **at most** Q operations on string S.

Note- Vowels in English alphabet are- 'a','e','i','o','u'.

Input Format:

First line contains an integer ***T*** denoting the number of test cases .
For each test case,in first line you will be given the string ***S*** and in second line an integer ***Q*** (maximum number of operations allowed).

Output Format:

For each test case , print the lexicographically greatest string that can be formed after applying **at most Q** operations on the given string.
Answer for each test case should come in a new line.

Constraints:

$1 \leq T \leq 10$

$1 \leq |S| \leq 10^5$

$0 \leq Q \leq 10^5$

String will consist of only **lowercase English** alphabets.

Sample Input	Sample Output
2 abcde 3 xyzwu 0	bbcdf xyzwu

Time Limit: 1
Memory Limit: 256
Source Limit: