2364 - Strong Cryptoanalysis

Description

Blue Team and Red Team are at war! Everybody knows that knowing is half the battle, so, since the beginning of the war, both sides have developed increasingly complex techniques to encrypt their transmissions, but the other side has always been able to break the encryption and gain the tactical advantage that comes with knowing the enemy's plans. But this time, Blue Team has developed an incredibly complex encryption algorithm, and we have unable to prevent their attacks ever since.

Of course, our engineers are hard at work day and night. You, as part of the cryptoanalysis team, know it very well: the long caffeine nights are already showing below your eyes. Last night, we made a breakthrough: we have been able to know how many repetitions of each character exist in a phrase. However, we can't tell yet which character is which.

The team lead has assigned you a simple task: given the amount of repetitions of each of the 26 letters of the English alphabet (26 numbers in no particular order), you are to find the lexicographically greatest possible string.

Input specification

On the first line of the input, there will be a single number: the amount of test cases (at most 10). Then, in each line, there will be a test case description. Each test case consists of 26 numbers in no particular order. Each number, which will be in the range [0; 1000], will indicate the amount of repetitions of a lowercase letter of the English alphabet (we don't know which letter).

Output specification

For each test case, you must print a line containing the lexicographically greatest possible string that can be formed with the amounts specified on the input. Always use lowercase letters.

Input sample

Caribbean Online Judge

Sample input

1

2 1 7 0 0 1 0 0 4 0 0 0 9 0 0 0 0 1 1 1 0 0 0 0 0

Sample output

zzzzzzzzyyyyyyxxxxwwvutsr

Hint(s)

Source Vladimir Antonio Charchabal Escalona

Added by jelara

Addition date 2013-05-02

Time limit (ms) 1000

Test limit (ms) 1000

Memory limit (kb) 130000

Output limit (mb) 64

Size limit (bytes) 15000

Enabled languages

Bash C C# C++ Java Pascal Perl PHP

Python Ruby Text