

Begin: 2023-03-12
15:00 UTC+3



End: 2023-03-29
23:00 UTC+3

Elapsed: 16:06:01:25

Running

Remaining:
1:00:58:34

[Overview](#) [Problem](#) [Status](#) [Rank \(16:06:01:24\)](#) [0 Comments](#)

[Setting](#) [☆Favorite](#)

[A](#) [B](#) [C](#) [D](#)

Submit

Status

My Status

Translate

PDF

Time limit

1000 ms

Mem limit

10000 kB

D - Anagram



You are to write a program that has to generate all possible words from a given set of letters.

Example: Given the word "abc", your program should - by exploring all different combination of the three letters - output the words "abc", "acb", "bac", "bca", "cab" and "cba".

In the word taken from the input file, some letters may appear more than once. For a given word, your program should not produce the same word more than once, and the words should be output in alphabetically ascending order.

Input

The input consists of several words. The first line contains a number giving the number of words to follow. Each following line contains one word. A word consists of uppercase or lowercase letters from A to Z. Uppercase and lowercase letters are to be considered different. The length of each word is less than 13.

Output

For each word in the input, the output should contain all different words that can be generated with the letters of the given word. The words generated from the same input word should be output in alphabetically ascending order. An upper case letter goes before the corresponding lower case letter.

Sample

Input	copy	Output	copy
3 aAb abc acba		Aab Aba aAb abA bAa baA abc acb bac bca cab cba aabc aacb abac abca acab acba baac baca	



dcaa
caab
caba
cbaa

All Copyright Reserved © 2010-2023 [Xu Han](#)**Hint**

Server Time: 2023-03-28 22:01:25 UTC+3

An upper case letter goes before the corresponding lower case letter.

