

Question:

String Manipulation: Sort of String

You are given *N* strings.

For each string, perform the following sorting operations:

- 1. Rearrange the alphabets in the string in terms of frequency. i.e. the alphabet having greater frequency comes first.
- 2. If two or more alphabets have the same frequency, the alphabet which is lexicographically small comes first.

Write a program to perform the above sorting operations.

Note

1. The frequency of an alphabet is the number of times an alphabet appears in a string.

Example: Consider the string *aabaac*; here, the frequency of a is 3, frequency of b is 1, and frequency of c is 1.

2. **Lexicographic order** is the way of ordering words based on the alphabetical order of English letters i.e. "a" is the smallest letter and "z" is the largest letter.

Function Description

In the provided code snippet, implement the provided `sortingOperations(...)` method using the variables to print the output. You can write your code in the space below the phrase **"WRITE YOUR LOGIC HERE"**.

There will be multiple test cases running so the Input and Output should match exactly as provided.

The base output variable `result` is set to a default value of `-404` which can be modified. Additionally, you can add or remove these output variables.

Input Format

The first line contains *N*, denoting the number of strings.

Next *N* lines contain strings on which sorting operation has to be performed.

Sample Input

```
2          -- denotes N
abaccadcc -- denotes a string
xyzxy     -- denotes a string
```

Output Format

The output contains *N* lines containing strings after the sorting operation is performed.

Sample Output

```
ccccaabd
xyxyz
```

Explanation

For the first string *abaccadcc*, "c" has the highest frequency.

Hence, we write c followed by "a", "b", and then "d".

Hence the output is *ccccaabd*.

For the second string *xyzxy*, "x" and "y" both have the same frequencies.

Since "x" is lexicographically small, we write that first, followed by "y" and then "z".

Hence the output is *xyxyz*.

Coding Language:C#

Test Case Input

```
2
abaccadcc
xyzxy
```

Expected Output

```
ccccaabd
xxyyz
```

Test Case Input

```
10
dulgvvgzwqg
gxtjtmtywr
hnlxniupgt
gzjotckivp
dpwvsdptae
pcscpilknb
btvyhhmflf
artrtnqxc
nrtcmcoadn
fkdsagnekft
```

Expected Output

```
gggdlquvwz
tttgjmrwxy
nnghilptux
cgijkoptvz
ddppwwaest
ccppbiklns
ffhhblmtvy
rrrttacnqx
ccnnadmort
ffkkdegnst
```

Test Case Input

```
5
wzenwebuau
vokfxzynwl
neldfeyrxk
wqadfiodgs
ykiuvzfcbc
```

Expected Output

```
eeuwwabnz
fklnovwxyz
eedfklnrxy
ddafgioqsw
ccbfikuvyz
```

Test Case Input

```
10
qakmc
rrtbk
vaixn
wmpnj
uproi
btska
ejqwr
elwlg
oaoiy
hrqkn
```

Expected Output

```
ackmq
rrbkt
ainvx
jmntpw
iopru
abkst
ejqrw
llegw
ooaiy
hknqr
```

Test Case Input

```
3
pzjim
njnfq
xyohs
```

Expected Output

```
ijmpz
nnfjq
hosxy
```

Test Case Input

```
5
xqycs
beoax
afkso
bldit
gwrys
```

Expected Output

```
cqsxy
abeox
afkos
bdilt
grswy
```