Morgan and a String

Jack and Daniel are friends. Both of them like letters, especially upper-case ones.
They are cutting upper-case letters from newspapers, and each one of them has their collection of letters stored in separate stacks.
One beautiful day, Morgan visited Jack and Daniel. He saw their collections. Morgan wondered what is the lexicographically minimal string, made of that two collections. He can take a letter from a collection when it is on the top of the stack.
Also, Morgan wants to use all the letters in the boys' collections.

Input Format

The first line contains the number of test cases, T.
Every next two lines have such format: the first line contains string A, and the second line contains string B
.

Constraints

$1 \leq T \leq 5$
$1 \leq |A| \leq 10^5$
$1 \leq |B| \leq 10^5$
A and B contain upper-case letters only.

Output Format

Output the lexicographically minimal string S for each test case in new line.

Sample Input

```
2
JACK
DANIEL
ABACABA
ABACABA
```

Sample Output

```
DAJACKNIEL
AABABACABACABA
```

Explanation

The first letters to choose from were J and D since they were at the top of the stack. D was chosen, the options then were J and A. A chosen. Then the two stacks hav J and N, so J is chosen. (Current string is DAJ)
Continuing this way till the end gives us the resulting string.