List Minimum (Harder)

Time limit: 1.0s **Memory limit:** 64M

After sorting numbers all day, perhaps you would like to sort strings instead! Such a wish is easily granted, perhaps because His Imperial Majesty, the Dark Lord and Paramount Leader of Dmojistan feels like granting wishes today!

This is such a trivial task, of course, perhaps you are wondering if there is a catch. Why should His Imperial Majesty, the Dark Lord and Paramount Leader of Dmojistan tell you? Perhaps because My Dark Master the Lord **quantum** feels like granting wishes? Well, My Dark Master the Lord **quantum** is only quite willing to grant you one wish, perhaps. Well, not perhaps, for it is a fact.

Perhaps you are questioning My Dark Master the Lord **quantum**'s power? Well, perhaps disaster awaits you. Good luck, perhaps. ⊜⊕

Sample Input

2 abce

abcd

Sample Output

abcd

abce