

The information can be selective so that the result of input filters out a portion of information. This can be done by scanning the input and comparing it with the information one wants to filter. Your goal is to write a program to read a string of characters as the filter for the following input string. Note that the filtering process ends when the scanned input is not in the input filter. Once the selective input is empty, a reverse filter should be made on the input.

Requirement: use scan set and inverted scan set.

**Input**

The input has several cases and ends with a single asterisk (\*) symbol. Each case contains two strings. The first string serves as the input filter, and the second string serves as the input.

**Output**

For each case, output the filtered string of characters if it is not empty; otherwise, reverse the selection and output the filtered string of characters.

**Sample Input**

abcde  
abcxyz  
abcde  
opqabc  
\*

**Sample Output**

abc  
opq