

Sharmeen And English Alphabet

Sharmeen is a little girl who learned English alphabet very well. In her book the alphabet are in a cyclic manner, that means after 'a' comes 'b' then 'c' and so on. And after 'z' comes 'a' again. You can think that the letters are arranged in a circle. Sharmeen is so good at it that if anyone gave her a starting and ending letter she can tell all the letters within the starting and ending letter. For example if anyone tell him 'y' to 'c' she will tell y z a b c.

Can you do it for her?

Input

You will be given two lowercase English letters. First letter is the starting letter and the second one is the ending letter.

Output

You have to print all the letters in between starting and ending letter including them. You have to print a space between two consecutive letters. Be careful that you can not give a space before the starting letter and after the ending letter but you have to print a newline after the ending letter.

See the sample input output for better understanding.

Example

Input:

y c

Output:

y z a b c