

Compare

You are given two strings in two different lines. Each string consists a mix of lower and upper-case letters. You need to, however, ignore the case of the letters this time. Your job is to determine which string is lexicographically smaller. If the first string is lexicographically smaller, print “1”. If the second string is lexicographically smaller, print “2”. If they are lexicographically equal, print “0”. Remember that we ignore the case of the letters and treat “a” and “A” as though they are the same character.

Input

The first line of the input contains the first string and the second line contains the second string. The length of each string is at most 100.

Output

Print “0”, “1”, or “2” as described above. Your last line of output must contain a newline character.

Sample Input 1

aAa
AAa

Sample Output 1

0

Sample Input 2

zAz
zAd

Sample Output 2

2

Sample Input 3

aBcDeF
FeDcBa

Sample Output 3

1