Eye Color

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	512 megabytes

In a distant land inhabited by magical creatures, geneticists have discovered a unique phenomenon: the eye color of offspring directly depends on the eye color of their parents. In this world, there are only three eye colors: brown, green, and blue.

Geneticists have developed several rules that determine what eye color a child can have:

- If at least one parent has brown eyes, then the child will definitely have brown eyes.
- Otherwise, if a parent has green eyes, then the child will also have green eyes.
- If both parents have the same eye color, then the child will have the same color.

The geneticists have an ancient book with statistics on the eye colors of parents and offspring. However, it may contain incorrect entries or the symbol '.', which indicates that the eye color was not recorded and can take any of the three values.

Your task is to help the geneticists verify the correctness of the records regarding eye colors. You are given the eye colors of both parents and their offspring. You need to determine all possible correct combinations of eye colors for the parents and the offspring in lexicographic order. If such combinations are impossible, output the word "Incorrect".

Input

You are given three space-separated eye colors: two parents and their offspring. The eye color can take the values brown, green, blue, or '.'.

Output

Output all possible correct combinations of eye colors for the parents and the offspring, separated by spaces, in lexicographic order, with each combination on a separate line. Or the word "Incorrect" if the combination is unattainable.

Examples

standard input	standard output
`blue blue blue`	`blue blue blue`
`blue brown .`	`blue brown brown`

`green . .`	`green blue green`
	`green brown brown`
	`green green green`

`blue blue brown`	`Incorrect`