

Crosswords

You have been spending your time solving crosswords. Having solved almost all that you could get your hands on. Now you want to make a few crosswords of your own. However, you do not have time for such fine work, so you have asked a friend of you to help you generate the crosswords. He is given two words, **A** and **B**. The word **A** must be output **horizontally**, and the word **B** **vertically**, so that the two words cross (i.e. share exactly one letter). The shared letter must be the first letter in **A** that is also contained in **B**, more specifically the first occurrence of that letter in each word.

For example, given the words **A** = "ABBA" and **B** = "CCBB", you need to output 4 lines as shown below:

```
.   C   .   .  
.   C   .   .  
A   B   B   A  
.   B   .   .
```

INPUT

The first and only line of input contains two words, **A** and **B**, not more than 30 characters long, separated by a single space. Both words will contain only uppercase English letters. There will be at least one letter contained in both words.

OUTPUT

Let **N** be the length of word **A**, and **M** the length of word **B**. The output must contain **M** lines, each containing **N** characters. The character grid must contain the two words crossed as described above. All other characters in the grid must be periods (the character '.', without quotes), thus padding all lines to the length of **N** characters