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Intermediate Division - Diff

**PROBLEM:** A useful computer utility is to report the differences between two files. In this program, you will compare two strings to find common substrings.

The following algorithm will be used: Consider each character in turn in the first string. If it appears in the second string, add it to a resulting common string and delete all characters in the second string up to and including that character.

For example, the common string from `abcddef` to `vdfaddwf` is `addf`. The common string from `vdfaddwf` to `abcddef` is `df`.

**INPUT:** 5 lines of data. Each line will contain two strings, A and B. The strings will contain letters only and the strings will be separated by a single blank. Each string will have fewer than 64 characters.

**OUTPUT:** For each line, find the common string from A to B and from B to A going from left to right. Then repeat the process going from right to left. This will produce 4 common strings. Print in alphabetical order all of the different letters that are contained in all 4 common strings. If there are none that are common to all 4 strings, print "NONE".

**SAMPLE INPUT** <http://www.datafiles.acsl.org/2019/contest2/int-sample-input.txt>

```
abcddef vdfaddwf
friends afraid
delicious indiginous
shalom saaalaaam
happy shipshape
```

**SAMPLE OUTPUT**

1. df
2. dfir
3. iosu
4. ams
5. hp