# Flower Finder

You will be given **two sequences of characters, representing vowels and consonants**. Your task is to start checking if the following words could be found:

* **"rose"**
* **"tulip"**
* **"lotus"**
* **"daffodil"**

Start by taking the **first character** of the **vowels collection** and the **last character** from the **consonants collection.** Then **check** if these letters are present in one or more of the given words. If a letter is present, that **part** **of the word** is considered **found**. The word is gradually revealed with each letter found. Continue processing the **next couple of letters** until you find **one of the given words above.**

A **letter (vowels or consonants) could participate in more than one word or more than one time in a word, for example:**

* The letter **"o"** is present in **"rose"**, **"lotus"**,and **"daffodil"**.
* The letter **"l"** is present in **"tulip"**, **"lotus"**, and **"daffodil"**.
* The letter **"f"** is present in the word "**daffodil"** twice.

**The** **consonant** and **the** **vowel** are **always** **removed** from the collection after trying to match them with the letters in the given words (whether successful or not). In the end, the program **stops** when **a word is found,** **or** **there are no more vowels or consonants**.

As a result, if you **found a word**, print **it** and **the remaining letters** in each collection in the format described below. Otherwise, print **"Cannot find any word!"** on the first line and **the remaining letters** in each sequence in the format described below.

**Look at the provided examples for a better understanding of the problem.**

### Input

* On the **first line**, you will receive **vowels**, **separated** by a single space (**" "**).
* On the **second line**, you will receive **consonants,** **separated** by a single space (**" "**).

### Output

* On the first line:
  + If a word is found, print it in the format: **"Word found: {word\_found}"**
  + Otherwise, print: **"Cannot find any word!"**
* On the next lines, print the remaining letters in each collection (if there are any left):
  + **"Vowels left: {vowel\_one} {vowel\_two} … {vowel\_N}"**
  + **"Consonants left: {consonants\_one} {consonants\_two} … {consonants\_N}"**

### Constraints

* All letters will be lowercase.
* The letter **'y' will always be a vowel.**
* The letter **'w' will always be a consonant.**

### Examples

|  |  |
| --- | --- |
| ****Input**** | ****Output**** |
| **o e a o e a i**  **p r s x r** | **Word found: rose**  **Vowels left: o e a i**  **Consonants left: p r** |
| ****Comment**** | |
| Start by taking the first volew "o" and the last consonant "r". They are found in words "rose", "lotus", and "daffodil".  Then, take "e" and "x". They are found in thr word "rose".  Then, take "a" and "s". They are found in words "rose", "lotus", and "daffodil".  The word "rose" is found, so we print it. Then we print the remaining letters in each sequence. | |

**from** collections **import** deque  
  
vowels **=** deque(el **for** el **in** input().**split**())  
consonants **=** [el **for** el **in** input().**split**()]  
  
flowers\_list **=** {  
 **"rose":** [el **for** el **in 'rose'**],  
 **"tulip":** [el **for** el **in 'tulip'**],  
 **"lotus":** [el **for** el **in 'lotus'**],  
 **"daffodil":** [el **for** el **in 'daffodil'**]  
}  
  
founded\_flower **= None  
  
while** vowels **and** consonants **and not** founded\_flower**:** current\_vowels **=** vowels.**popleft**()  
 current\_consonants **=** consonants.**pop**()  
  
 **for** current\_letter **in** (current\_vowels, current\_consonants)**:  
 for** key\_flower\_name, value\_flower\_letters **in** flowers\_list.**items**()**:  
 while** value\_flower\_letters.**count**(current\_letter)**:** value\_flower\_letters.**remove**(current\_letter)  
 **if not** value\_flower\_letters**:** *# if there are no more letters in the value* founded\_flower **=** key\_flower\_name  
  
**if** founded\_flower**:** print(**f"Word found: {**founded\_flower**}"**)  
**else:** print(**"Cannot find any word!"**)  
**if** vowels**:** print(**f"Vowels left: {' '**.**join**(vowels)**}"**)  
**if** consonants**:** print(**f"Consonants left: {' '**.**join**(consonants)**}"**)