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Started on	Wednesday, 29 May 2024, 12:53 PM
State	Finished
Completed on	Wednesday, 29 May 2024, 10:14 PM
Time taken	9 hours 20 mins
Marks	5.00/5.00
Grade	100.00 out of 100.00

Question **1**

Correct

Mark 1.00 out of 1.00

Write a program to eliminate the common elements in the given 2 arrays and print only the non-repeating elements and the total number of such non-repeating elements.

Input Format:
The first line contains space-separated values, denoting the size of the two arrays in integer format respectively.
The next two lines contain the space-separated integer arrays to be compared.

[Sample](#) Input:

5 4
1 2 8 6 5
2 6 8 10

[Sample](#) Output:

1 5 10
3

[Sample](#) Input:

5 5
1 2 3 4 5
1 2 3 4 5

[Sample](#) Output:

NO SUCH ELEMENTS

For example:

Input	Result
5 4 1 2 8 6 5 2 6 8 10	1 5 10 3
5 5 1 2 3 4 5 1 2 3 4 5	NO SUCH ELEMENTS

Answer: (penalty regime: 0 %)

```
1 a=input()
2 s1=input()
3 s2=input()
4 t1=s1.split()
5 t2=s2.split()
6 x=set(t1)
7 y=set(t2)
8 common=x.intersection(y)
9 z=x.union(y)
10 p=z-common
11 q=sorted(int(x) for x in p)
12 result=' '.join(map(str,q))
13 if len(q)==0:
14     print("NO SUCH ELEMENTS")
15 else:
16     print(result)
17     print(len(q))
```

	Input	Expected	Got	
✓	5 4 1 2 8 6 5 2 6 8 10	1 5 10 3	1 5 10 3	✓

	Input	Expected	Got	
✓	3 3 10 10 10 10 11 12	11 12 2	11 12 2	✓
✓	5 5 1 2 3 4 5 1 2 3 4 5	NO SUCH ELEMENTS	NO SUCH ELEMENTS	✓

Passed all tests! ✓

Correct







Marks for this submission: 1.00/1.00.

Question 2
Correct
Mark 1.00 out of 1.00

Given an array of **strings** **words**, return the words that can be typed using letters of the alphabet on only one row of American keyboard like the image below.

In the **American keyboard**:

- the first row consists of the characters "qwertyuiop",
- the second row consists of the characters "asdfghjkl", and
- the third row consists of the characters "zxcvbnm".

~ 1	! 2	@ 3	# 4	\$ 5	% 6	^ 7	& 8	* 9	(0) -	+ =	 Backspace	
Tab 	Q	W	E	R	T	Y	U	I	O	P	{ [}	 \
Caps Lock 	A	S	D	F	G	H	J	K	L	:	" '	Enter 	
Shift 	Z	X	C	V	B	N	M	< ,	> .	? /	Shift 		
Ctrl	Win Key	Alt								Alt	Win Key	Menu	Ctrl

Example 1:

Input: words = ["Hello", "Alaska", "Dad", "Peace"]
Output: ["Alaska", "Dad"]

Example 2:

Input: words = ["omk"]
Output: []

Example 3:

Input: words = ["adsdf", "sfd"]
Output: ["adsdf", "sfd"]

For example:

Input	Result
4 Hello Alaska Dad Peace	Alaska Dad
2 adsfd afd	adsfd afd

Answer: (penalty regime: 0 %)

```
1 x=int(input())
2 y=[]
3 for i in range (x):
4     str=input()
5     y.append(str)
6 a=set("qwertyuiop")
7 b=set("asdfghjkl")
8 c=set('zxcvbnm')
9 ans=[]
10 for j in y:
11     i=j.lower()
12     if set(i)<=a or set(i)<=b or set(i)<=c:
13         ans.append(j)
14 if len(ans)==0:
15     print("No words")
16 else:
17     for i in ans:
18         print(i)
```

	Input	Expected	Got	
✓	4 Hello Alaska Dad Peace	Alaska Dad	Alaska Dad	✓
✓	1 omk	No words	No words	✓
✓	2 adsfd afd	adsfd afd	adsfd afd	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **3**
Correct
Mark 1.00 out of 1.00

Given an array of integers `nums` containing `n + 1` integers where each integer is in the range `[1, n]` inclusive. There is only **one repeated number** in `nums`, return *this repeated number*. Solve the problem using [set](#).

Example 1:

Input: `nums = [1,3,4,2,2]`
Output: `2`

Example 2:

Input: `nums = [3,1,3,4,2]`
Output: `3`

For example:

Input	Result
1 3 4 4 2	4

Answer: (penalty regime: 0 %)

```
1 x=input()
2 y=x.split()
3 z=list(y)
4 a=[]
5 b=[]
6 for element in z:
7     if element in a:
8         b.append(element)
9     else:
10        a.append(element)
11 c=' '.join(map(str,b))
12 print(c)
```

	Input	Expected	Got	
✓	1 3 4 4 2	4	4	✓
✓	1 2 2 3 4 5 6 7	2	2	✓

Passed all tests! ✓

Correct
Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

Given a tuple and a positive integer k, the task is to find the count of distinct pairs in the tuple whose sum is equal to **K**.

Examples:

Input: t = (5, 6, 5, 7, 7, 8), K = 13

Output: 2

Explanation:
Pairs with sum K(= 13) are {(5, 8), (6, 7), (6, 7)}.
Therefore, distinct pairs with sum K(= 13) are { (5, 8), (6, 7) }.
Therefore, the required output is 2.

For example:

Input	Result
1,2,1,2,5 3	1
1,2 0	0

Answer: (penalty regime: 0 %)

```
1 x=input()
2 y=int(input())
3 a=x.split(',')
4 t=tuple(int(num) for num in a)
5 ans=set()
6 for i in range(len(t)):
7     for j in range(i+1, len(t)):
8         if t[i]+t[j]==y:
9             pair=(min(t[i],t[j]), max(t[i],t[j]))
10            if pair not in ans:
11                ans.add((t[i],t[j]))
12 print(len(ans))
13
```

	Input	Expected	Got	
✓	5,6,5,7,7,8 13	2	2	✓
✓	1,2,1,2,5 3	1	1	✓
✓	1,2 0	0	0	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

There is a malfunctioning keyboard where some letter keys do not work. All other keys on the keyboard work properly.

Given a string text of words separated by a single space (no leading or trailing spaces) and a string brokenLetters of all distinct letter keys that are broken, return the number of words in text you can fully type using this keyboard.

Example 1:

Input: text = "hello world", brokenLetters = "ad"

Output:

1

Explanation: We cannot type "world" because the 'd' key is broken.

For example:

Input	Result
hello world ad	1
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Answer: (penalty regime: 0 %)

```
1 a=input()
2 b=input()
3 x=set()
4 y=set()
5 for letter in a:
6     x.add(letter)
7 for letter in b:
8     y.add(letter)
9 z=0
10 for element in x:
11     if element in y:
12         z+=1
13 print(z)
```

	Input	Expected	Got	
✓	hello world ad	1	1	✓
✓	Welcome to REC e	1	1	✓
✓	Faculty Upskilling in Python Programming ak	2	2	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◀ Week7_MCQ

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