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<b>Started on</b>	Friday, 7 June 2024, 8:18 PM
<b>State</b>	Finished
<b>Completed on</b>	Friday, 7 June 2024, 8:44 PM
<b>Time taken</b>	26 mins 23 secs
<b>Marks</b>	4.00/5.00
<b>Grade</b>	<b>80.00</b> out of 100.00

Question 1

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 # Take user input for the array
2 nums = list(map(int, input().split()))
3
4 # Set to store seen numbers
5 num_set = set()
6
7 # Iterate through the array and find the duplicate element
8 for num in nums:
9     if num in num_set:
10         print(num)
11         break
12 else:
13     num_set.add(num)

```

	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 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".

~	!	@	#	\$	%	^	&	*	(	)	-	+	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	Alaska
Hello	Dad
Alaska	
Dad	
Peace	
2	adsfd
adsfd	afd
afd	

Answer: (penalty regime: 0 %)

```

1 def findwords(words):
2     row1 = set('qwertyuiop')
3     row2 = set('asdfghjkl')
4     row3 = set('zxcvbnm')
5     result = []
6     for word in words:
7         w = set(word.lower())

```



	Input	Expected	Got	
✓	4 Hello Alaska Dad Peace	Alaska Dad	Alaska Dad	✓
✓	1 omk	No words	No words	✓
✓	2 adsfd afd 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 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 t=tuple(map(int,input().split(',')))
2 k=int(input())
3 s=set(t)
4 count=0
5 for x in s:
6     if k-x in s:
7         count+=1
8 result=count//2
9 print(result)
```

	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.

Question **4**

Not answered

Mark 0.00 out of 1.00

Coders here is a simple task for you, Given string str. Your task is to check whether it is a binary string or not by using python [set](#).

Examples:

Input: str = "01010101010"

Output: Yes

Input: str = "REC101"

Output: No

**For example:**

Input	Result
01010101010	Yes
010101 10101	No

**Answer:** (penalty regime: 0 %)

1 ||

Question **5**

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 def find_non_repeating_elements():
2     n,m=map(int, input().split())
3     arr1=list(map(int, input().split()))
4     arr2=list(map(int, input().split()))
5     set1=set(arr1)
6     set2=set(arr2)
7     non_repeating_elements = set1.symmetric_difference(set2)
8     if len(non_repeating_elements) == 0:
9         print("NO SUCH ELEMENTS")
10    else:
11        print(' '.join(map(str, non_repeating_elements)))
12        print(len(non_repeating_elements))
13    find_non_repeating_elements()
```



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

[◀ Week7\\_MCQ](#)

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