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Started on	Friday, 10 May 2024, 7:56 AM
State	Finished
Completed on	Saturday, 18 May 2024, 2:58 PM
Time taken	8 days 7 hours
Overdue	5 days 7 hours
Marks	5.00/5.00
Grade	100.00 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 a=list(map(int,input().split()))
2 for i in a:
3     if a[i] in a[:i]:
4         print(a[i])
5         break
```

	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

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 a=input()
2 d=set(a)
3 c={'0','1'}
4 if d==c or d=={'0'} or d=={'1'}:
5     print("Yes")
6 else:
7     print("No")
```

	Input	Expected	Got	
✓	01010101010	Yes	Yes	✓
✓	REC123	No	No	✓
✓	010101 10101	No	No	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 3

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

Answer: (penalty regime: 0 %)

```

1 | a,b=map(int,input().split())
2 | c=list(map(int, input().split()))
3 | d=list(map(int, input().split()))
4 | k=[x for x in c if x not in d]+[x for x in d if x not in c]
5 | if k==[]:
6 |     print("NO SUCH ELEMENTS")
7 | for i in k:
8 |     print(i,end=" ")
9 | print("\n",len(k),sep="")
10 |
11 |
```

	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	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

The **DNA sequence** is composed of a series of nucleotides abbreviated as 'A', 'C', 'G', and 'T'.

- For example, "ACGAATTCCG" is a **DNA sequence**.

When studying **DNA**, it is useful to identify repeated sequences within the DNA.

Given a string `s` that represents a **DNA sequence**, return all the **10-letter-long** sequences (substrings) that occur more than once in a DNA molecule. You may return the answer in **any order**.

Example 1:

Input: `s = "AAAAACCCCCAAAAACCCCCAAAAGGGTTT"`

Output: `["AAAAACCCCC", "CCCCAAAAA"]`

Example 2:

Input: `s = "AAAAAAAAAAAA"`

Output: `["AAAAAAAAA"]`

For example:

Input	Result
AAAAACCCCCAAAAACCCCCAAAAGGGTTT	AAAAACCCCC CCCCAAAAA

Answer: (penalty regime: 0 %)

```

1 def findRepeatedDnaSequences(s):
2     if len(s) < 10:
3         return []
4     seq = {}
5     repeated = set()
6     for i in range(len(s) - 9):
7         sequence = s[i:i + 10]
8         if sequence in seq:
9             repeated.add(sequence)
10        else:
11            seq[sequence] = 1
12    return list(repeated)
13 dna = input()
14 repeated = findRepeatedDnaSequences(dna)
15 for i in repeated:
16     print(i)
17
18

```

	Input	Expected	Got	
✓	AAAAACCCCCAAAAACCCCCAAAAGGGTTT	AAAAACCCCC CCCCAAAAA	AAAAACCCCC CCCCAAAAA	✓

	Input	Expected	Got	
✓	AAAAAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 5

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 n=int(input())
2 l=[]
3 x=1
4 y=1
5 z=1

```



```

6  a=0
7  r1="qwertyuiop"
8  R1="QWERTYUIOP"
9  r2="asdfghjkl"
10 R2="ASDFGHJKL"
11 r3="zxcvbnm"
12 R3="ZXCVBNM"
13 for i in range(n):
14     l.append(input())
15 for i in range(n):
16     s=l[i]
17     x=1
18     y=1
19     z=1
20     for j in range(len(s)):
21         if(s[j] in r1):
22             x*=1
23         elif(s[j] in R1):
24             x*=1
25         else:
26             x*=0
27         if(s[j] in r2):
28             y*=1
29         elif(s[j] in R2):
30             y*=1
31         else:
32             y*=0
33         if(s[j] in r3):
34             z*=1
35         elif(s[j] in R3):
36             z*=1
37         else:
38             z*=0
39         if(x==1 or y==1 or z==1):
40             print(s)
41             a+=1
42     s=""
43 if(a==0):
44     print("No words")
45

```

	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.

◀ Week7_MCQ

Jump to...

[Week8_MCQ](#) ▶