Dashboard / My courses / PSPP/PUP / Experiments based on Tuples, Sets and its operations / Week7_Coding

Started on	Tuesday, 4 June 2024, 6:10 PM
State	Finished
Completed on	Tuesday, 4 June 2024, 9:58 PM
Time taken	3 hours 47 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 %)

```python
def find_non_repeating_elements():
    n,m=map(int, input().split())
    arr1=list(map(int, input().split()))
    arr2=list(map(int, input().split()))
    set1=set(arr1)
    set2=set(arr2)
    non_repeating_elements = set1.symmetric_difference(set2)
    if len(non_repeating_elements) == 0:
        print("NO SUCH ELEMENTS")
    else:
        print(' '.join(map(str, non_repeating_elements)))
        print(len(non_repeating_elements))
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.

Question **2**

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 %)

```
t=tuple(map(int,input().split(",")))
k=int(input())
s=set(t)
count=0
for x in s:
    if k-x in s:
        count+=1
result=count//2
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 **3**

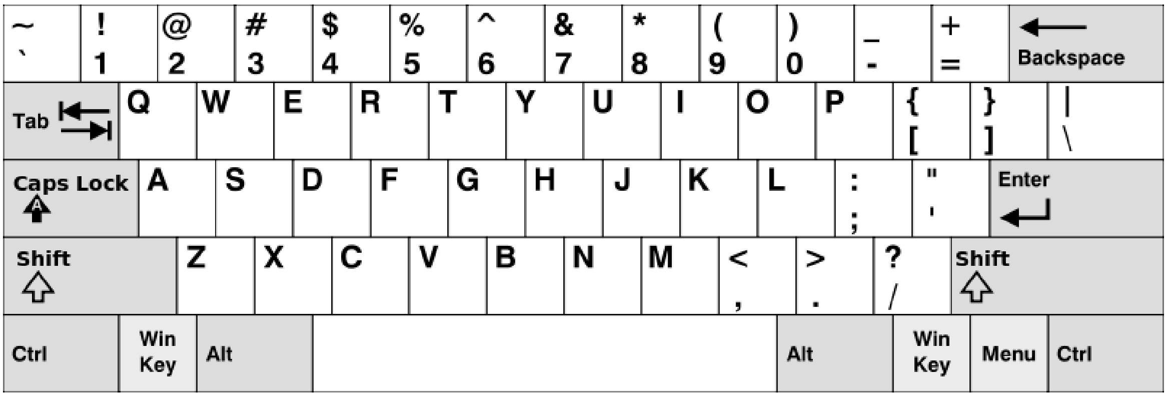
Correct

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"`.



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 %)

```
def findwords(words):
    row1 = set('qwertyuiop')
    row2 = set('asdfghjkl')
    row3 = set('zxcvbnm')
    result = []
    for word in words:
        w = set(word.lower())
        if w.issubset(row1) or w.issubset(row2) or w.issubset(row3):
            result.append(word)
    if len(result) == 0:
        print("No words")
    else:
        for i in result:
            print(i)
a = int(input())
arr = [input() for i in range(a)]
findwords(arr)
```

	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 **4**

Correct

Mark 1.00 out of 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

`Faculty Upskilling in Python Programming`
`ak`
	2

Answer: (penalty regime: 0 %)

```
a=list(input().split())
b=list(input())
c=0
for i in a:
    d=0
    for j in b:
        if j in i.lower():
            d+=1
    if d == 0:
        c+=1
print(c)
```

	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.

Question **5**

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 %)

```python
a = input()
try:
    c = int(a)
    print("Yes")
except:
    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.

◄ Week7_MCQ

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