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Started on	Wednesday, 5 June 2024, 1:04 PM
State	Finished
Completed on	Wednesday, 5 June 2024, 2:46 PM
Time taken	1 hour 42 mins
Marks	3.00/5.00
Grade	60.00 out of 100.00

Question 1

Incorrect

Mark 0.00 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]))
10            if pair not in ans:
11                ans.add((t[i],t[j]))
12 print(len(ans))

```

Syntax Error(s)

Sorry: IndentationError: unindent does not match any outer indentation level (__tester__.python3, line 10)

Incorrect

Marks for this submission: 0.00/1.00.

Question 2

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 = "AAAAACCCCCAAAAACCCCCAAAAAGGGTTT"`

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

Example 2:

Input: `s = "AAAAAAAAAAAA"`

Output: `["AAAAAAAAA"]`

For example:

Input	Result
AAAAACCCCCAAAAACCCCCAAAAAGGGTTT	AAAAACCCC CCCCAAAAA

Answer: (penalty regime: 0 %)

```

1 s=input()
2 d={}
3 a=[]
4 for i in range (len(s)-9):
5     x=s[i:i+10]
6     if x in d:
7         if d[x]==1:
8             a.append(x)
9             d[x]+=1
10        else: d[x]=1
11 for i in a:
12     print(i)

```

	Input	Expected	Got	
✓	AAAAACCCCCAAAAACCCCCAAAAAGGGTTT	AAAAACCCC CCCCAAAAA	AAAAACCCC CCCCAAAAA	✓
✓	AAAAAAAAAAAAA	AAAAAAAAA	AAAAAAAAA	✓

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
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))
18
```

	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 4

Incorrect

Mark 0.00 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=int(input())
2 word=[]
3 for i in range (a):
4     q=input()
5     word.append(q)
6 a=set("qwertyuiop")
7 b=set("asdfghjkl")
8 c=set("zxcvbnm")
9 result=[]
10 for j in word:
11     i=j.lower()
12     if set (i)<=a or set (i)<=b or set(i)<=c:
13         result.append(j)
14     if len (result)>0:
15         for i in result:
16             print(i)
17     else:
18         print("No words")

```

	Input	Expected	Got	
✗	1 3 4 4 2	4	***Run error*** Traceback (most recent call last): File "__tester__.python3", line 1, in <module> a=int(input()) ^^^^^^^^^^^^^ ValueError: invalid literal for int() with base 10: '1 3 4 4 2'	✗

Testing was aborted due to error.

Your code must pass all tests to earn any marks. Try again.

Show differences

Incorrect

Marks for this submission: 0.00/1.00.

Question 5

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 %)

```

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=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.

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