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Started on	Thursday, 23 May 2024, 7:18 PM
State	Finished
Completed on	Thursday, 23 May 2024, 10:08 PM
Time taken	2 hours 50 mins
Marks	5.00/5.00
Grade	100.00 out of 100.00

Question 1

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 n=input()
2 k=int(input())
3 lst=()
4 for i in str(n):
5     if i != ",":
6         lst+=(i,)
7 tup=lst
8
9
10 seen = set()
11 pairs = set()
12
13 for number in tup:
14     for j in range(1,len(tup)):
15         if k== int(number)+ int(tup[j]):
16
17
18         # Add the pair as a sorted tuple to ensure uniqueness
19         seen.add(number)
20         seen.add(tup[j])
21
22
23 print(int(len(seen)//2)
24

```

	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 **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 n=str(input())
2 l=[]
3 for i in n:
4     if i=="0" or i=="1":
5
6         l.append(i)
7
8 if len(l)==len(n):
9     print("Yes")
10 else:
11     print("No")
12

```

	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
2 n = input().strip().split()
3 size1 = int(n[0])
4 size2 = int(n[1])
5
6
7 arr1 = list(map(int, input().strip().split()))
8 arr2 = list(map(int, input().strip().split()))
9
10 set1 = set(arr1)
11 set2 = set(arr2)
12
13
14 u1 = set1 - set2
15 u2 = set2 - set1
16
17 result = list(u1.union(u2))
18
19 if not result:
20     print("NO SUCH ELEMENTS")
21 else:
22     result.sort()
23     print(' '.join(map(str, result)))
24     print(len(result))
```

	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

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=[]
2 b = input()
3 a.append(b)
4 b = str(a)
5 b.split()
6 c=[]
7 d = []
8 for i in b:
9     if i not in c:
10         if chr(48)<i<chr(57):
11             c.append(i)
12     elif i in c:
13         if chr(48)<i<chr(57):
14             d.append(i)
15 print("".join(d))

```

	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 5

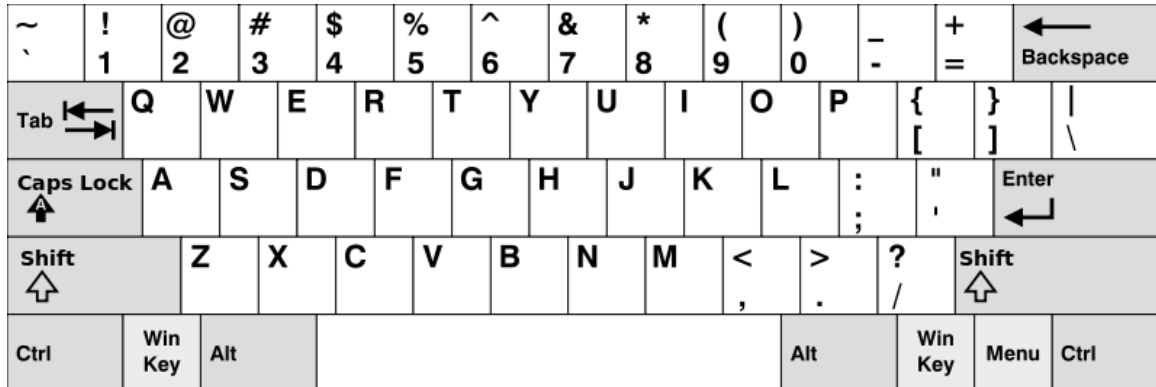
Correct

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".



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
3 words=[]
4 for i in range(n):
5     words.append(input())
6
7
8
9 row1 = set("qwertyuiop")
10 row2 = set("asdfghjkl")
11 row3 = set("zxcvbnm")
12

```

```

13
14 result = []
15
16 for word in words:
17     lower_word = set(word.lower()) # Convert word to lowercase and create a set of characters
18     if lower_word <= row1 or lower_word <= row2 or lower_word <= row3:
19         result.append(word)
20 if result != []:
21     for i in range(0,int(len(result))):
22         y="".join(result[i])
23         print(y)
24 else:
25     print("No words")
26
27
28
29
30

```

	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.

◀ Week7_MCQ

Jump to...

Dictionary ►