



Python Course

Test # 2



1)

Write a Python program to combine each line from first file with the corresponding line in second file.

2)

Write a Python program to sort Counter by value in descending order.

Input:

```
{'Math':81,'English':76, 'Physics':83, 'Chemistry':87}
```

Output:

```
[('Chemistry', 87), ('Physics', 83), ('Math', 81), ('English':76)]
```

3)

Write a Python class named Circle constructed by a radius and two methods which will compute the area and the perimeter of a circle.

4)

Write a Python class to find the three elements that sum to zero from a set of n real numbers.

Input:

```
[-25, -10, -7, -3, 2, 4, 8, 10]
```

Output :

```
[ [-10, 2, 8],  
  [-7, -3, 10]]
```

5)

Write a Python class to find a pair of elements (indices of the two numbers) from a given array whose sum equals a specific target number.

Input:

```
numbers= [10,20,10,30,50,60,70], target=50
```

Output:

```
1, 3
```

6)

Write a Python function to find validity of a string of parentheses, '(', ')', '{', '}', '[' and ']'. These brackets must be close in the correct order, for example "()", [{}], and "[]{}" are valid but "[)", "({[})", and "{{{" are invalid.

7)

Write a Python program to create a dictionary of keys x, y, and z where each key has as value a list from 11-20, 21-30, and 31-40 respectively. Access the fifth value of each key from the dictionary.

Output:

```
{'x': [11, 12, 13, 14, 15, 16, 17, 18, 19],  
'y': [21, 22, 23, 24, 25, 26, 27, 28, 29],  
'z': [31, 32, 33, 34, 35, 36, 37, 38, 39]}
```

15

25
35

8)

Write a Python program to count repeated characters in a string.

Input:

'thequickbrownfoxjumpsoverthelazydog'

Output:

o 4
e 3
u 2
h 2
r 2
t 2



Best of luck 😊