

# Rajalakshmi Engineering College

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## NeoColab\_REC\_CS23221\_Python Programming

### REC\_Python\_Week 3\_CY

Attempt : 1  
Total Mark : 30  
Marks Obtained : 30

### Section 1 : Coding

#### 1. Problem Statement

You have two strings str1 and str2, both of equal length.

Write a Python program to concatenate the two strings such that the first character of str1 is followed by the first character of str2, the second character of str1 is followed by the second character of str2, and so on.

For example, if str1 is "abc" and str2 is "def", the output should be "adbecf".

#### ***Input Format***

The input consists of two strings in each line.

#### ***Output Format***

The output displays the concatenated string in the mentioned format.

Refer to the sample output for formatting specifications.

### **Sample Test Case**

Input: abc

def

Output: adbecf

### **Answer**

```
str1 = input()
str2 = input()
result = ".join(a + b for a, b in zip(str1, str2))
print(result)
```

**Status :** Correct

**Marks :** 10/10

## **2. Problem Statement**

Sarah is a technical writer who is responsible for formatting two important documents. Both documents contain a certain placeholder character that needs to be replaced with another character before they can be finalized. To ensure consistency in formatting, Sarah wants you to help her write a program that processes both documents by replacing the placeholder character with the new one.

Sarah also prefers a neat and structured output, so she wants you to ensure that both modified documents are printed in a single line, separated by a space, using the `format()` function.

### **Example**

Input:

Hello

World

o

a

Output:

Hella World

Explanation:

Here the character 'o' is replaced with 'a' in the concatenated string.

### ***Input Format***

The first line contains string1, the first document.

The second line contains string2, the second document.

The third line contains char1, the placeholder character that needs to be replaced.

The fourth line contains char2, the new character that will replace the placeholder.

### ***Output Format***

The output displays a single line containing the modified string1 and string2, separated by a space.

Refer to the sample output for the formatting specifications.

### ***Sample Test Case***

Input: Hello

World

o

a

Output: Hella World

### ***Answer***

```
# You are using Python
```

```
doc1 = input()
```

```
doc2 = input()
```

```
old_char = input()
```

```
new_char = input()
```

```
doc1 = doc1.replace(old_char, new_char)
doc2 = doc2.replace(old_char, new_char)
print("{} {}".format(doc1, doc2))
```

**Status :** Correct

**Marks :** 10/10

### 3. Problem Statement

Emily is a data analyst working for a company that collects feedback from customers in the form of text messages. As part of her data validation tasks, Emily needs to perform two operations on each message:

Calculate the sum of all the digits mentioned in the message. If the sum of the digits is greater than 9, check whether the sum forms a palindrome number.

Your task is to help Emily automate this process by writing a program that extracts all digits from a given message, calculates their sum, and checks if the sum is a palindrome if it is greater than 9.

#### **Input Format**

The input consists of a string *s*, representing the customer message, which may contain letters, digits, spaces, and other characters.

#### **Output Format**

The output prints an integer representing the sum of all digits in the string, followed by a space.

If the sum is greater than 9, print "Palindrome" if the sum is a palindrome, otherwise print "Not palindrome".

If the sum is less than or equal to 9, no palindrome check is required.

Refer to the sample output for the formatting specifications.

### Sample Test Case

Input: 12 books 4 pen

Output: 7

### Answer

```
# You are using Python
s = input()
digit_sum = sum(int(ch) for ch in s if ch.isdigit())
print(digit_sum, end=' ')
if digit_sum > 9:
    if str(digit_sum) == str(digit_sum)[::-1]:
        print("Palindrome")
    else:
        print("Not palindrome")
```

**Status :** Correct

**Marks :** 10/10