

# 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

Raj wants to write a program that takes a list of strings as input and returns the longest word in the list. If there are multiple words with the same length, the program should return the first one encountered.

Help Raj in his task.

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

The input consists of a single line of space-separated strings.

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

The output prints a string representing the longest word in the given list.

Refer to the sample output for formatting specifications.

### **Sample Test Case**

Input: cat dog elephant lion tiger giraffe

Output: elephant

### **Answer**

```
s=input()
words=s.split()
lword=""
maxlen=0
for word in words:
    if len(word)>maxlen:
        lword=word
        maxlen=len(word)
print(lword)
```

**Status :** Correct

**Marks :** 10/10

## **2. 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**

```
mes=input()
digitsum=sum(int(char)
for char in mes if char.isdigit())
if digitsum >9:
    if str(digitsum)== str(digitsum)[::-1]:
        print(digitsum,"Palindrome")
    else:
        print(digitsum,"Not palindrome")
else:
    print(digitsum)
```

**Status :** Correct

**Marks :** 10/10

### **3. 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***

```
s1=input()
s2=input()
result=""
for i in range(len(s1)):
    result+=s1[i]+s2[i]
print(result)
```

**Status :** Correct

**Marks :** 10/10