

Experiment 2.1

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Branch: CSE

Section/Group:607A

Semester: 4th

Date of Performance: 04/03/2022

Subject Name:Programming in Python Lab

Subject Code: 22E-20CSP-259

1) Aim/Overview of the practical:

Q1. Python program to check whether the string is Symmetrical or Palindrome.

2) Task to be done/ Which logistics used:

To write a python program to check whether the string is Symmetrical or Palindrome

3) Algorithm/Flowchart (For programming based labs):

4) Steps for experiment/practical/Code:

```
exp2.1Q1.py - /Users/rajivpaul/Documents/python programs/exp2.1Q1.py (3.10....
def palindrome(a):
    mid = (len(a)-1)//2
    start = 0
    last = len(a)-1
    flag = 0

    while(start <= mid):
        if (a[start]== a[last]):
            start += 1
            last -= 1
        else:
            flag = 1
            break;

    if flag == 0:
        print("The entered string is palindrome")
    else:
        print("The entered string is not palindrome")

def symmetry(a):
    n = len(a)
    flag = 0

    if n%2:
        mid = n//2 +1
    else:
        mid = n//2
```

Ln: 41 Col: 2

```
exp2.1Q1.py - /Users/rajivpaul/Documents/python programs/exp2.1Q1.py (3.10....
        else:
            print("The entered string is palindrome")
        print("The entered string is not palindrome")

def symmetry(a):
    n = len(a)
    flag = 0

    if n%2:
        mid = n//2 +1
    else:
        mid = n//2

    start1 = 0
    start2 = mid
    while(start1 < mid and start2 < n):
        if (a[start1]== a[start2]):
            start1 = start1 + 1
            start2 = start2 + 1
        else:
            flag = 1
            break

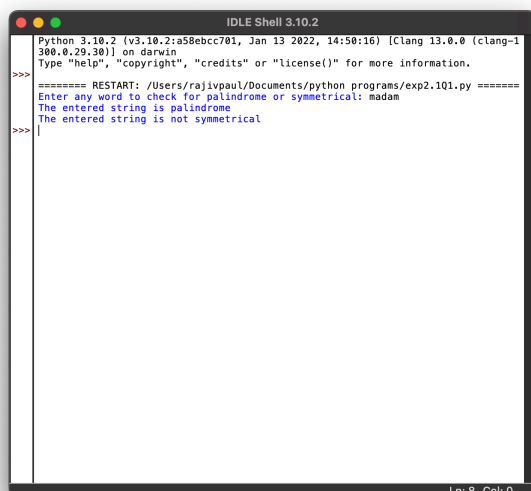
    if flag == 0:
        print("The entered string is symmetrical")
    else:
        print("The entered string is not symmetrical")

string = input(('Enter any word to check for palindrome or symmetrical: '))
palindrome(string)
symmetry(string)
```

Ln: 44 Col: 1

5. Observations/Discussions/ Complexity Analysis:

6. Result/Output/Writing Summary:



```
Python 3.10.2 (v3.10.2:a58ebcc701, Jan 13 2022, 14:50:16) [Clang 13.0.0 (clang-1300.0.29.30)] on darwin
Type "help()", "copyright()", "credits()" or "license()" for more information.
>>>
===== RESTART: /Users/rajivpaul/Documents/python programs/exp2.101.py =====
Enter any word to check for palindrome or symmetrical: madam
The entered string is palindrome
>>>
The entered string is not symmetrical
>>>
```

1) Aim/Overview of the practical:

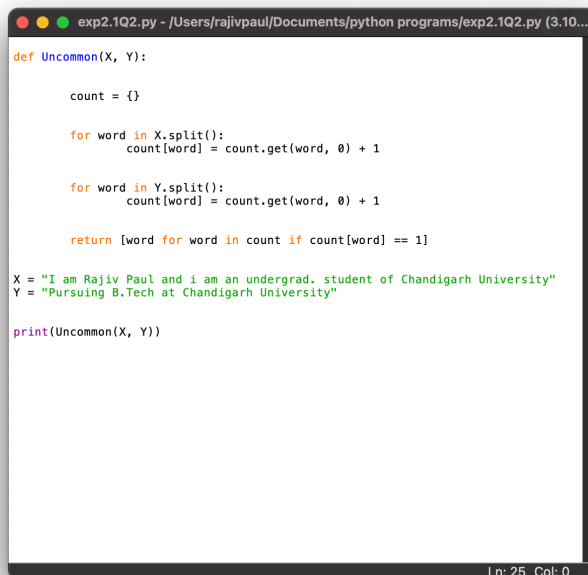
Q2. Python program to find uncommon words from two Strings

2) Task to be done/ Which logistics used:

To write a program to find uncommon words from two Strings .

3) Algorithm/Flowchart (For programming based labs):

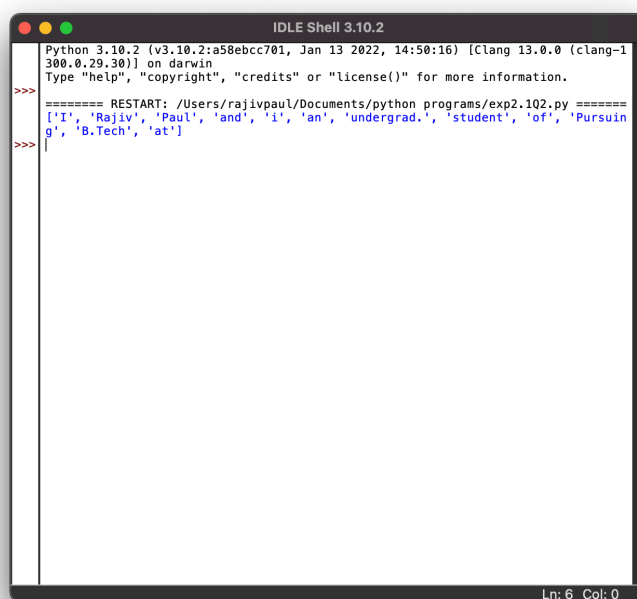
4) Steps for experiment/practical/Code:



```
def Uncommon(X, Y):  
  
    count = {}  
  
    for word in X.split():  
        count[word] = count.get(word, 0) + 1  
  
    for word in Y.split():  
        count[word] = count.get(word, 0) + 1  
  
    return [word for word in count if count[word] == 1]  
  
X = "I am Rajiv Paul and i am an undergrad. student of Chandigarh University"  
Y = "Pursuing B.Tech at Chandigarh University"  
  
print(Uncommon(X, Y))
```

5. Observations/Discussions/ Complexity Analysis:

6. Result/Output/Writing Summary:



```
Python 3.10.2 (v3.10.2:a58ebcc701, Jan 13 2022, 14:50:16) [Clang 13.0.0 (clang-1300.0.29.30)] on darwin
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: /Users/rajivpaul/Documents/python programs/exp2.102.py =====
['I', 'Rajiv', 'Paul', 'and', 'I', 'an', 'undergrad.', 'student', 'of', 'Pursuin
g', 'B.Tech', 'at']
>>>
```

1) Aim/Overview of the practical:

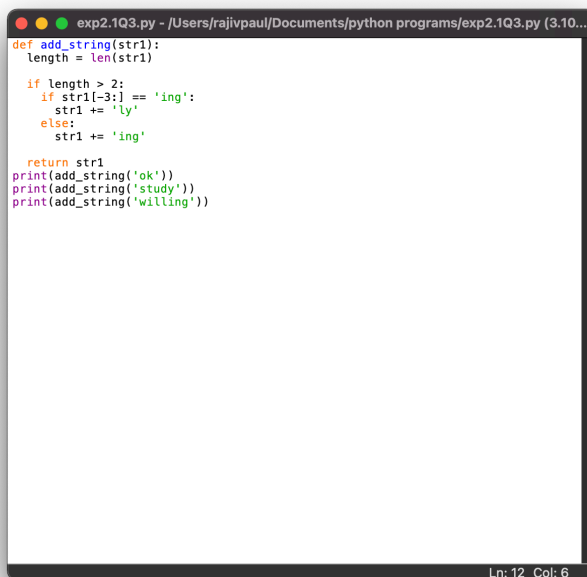
Q3. Write a Python program to add 'ing' at the end of a given string (length should be at least 3). If the given string already ends with 'ing' then add 'ly' instead. If the string length of the given string is less than 3, leave it unchanged. Example:- Sample String : 'abc' Expected Result : 'abcing' Sample String : 'string' Expected Result : 'stringly'

2) Task to be done/ Which logistics used:

To write a program to add 'ing' at the end of a given string (length should be at least 3). If the given string already ends with 'ing' then add 'ly' instead. If the string length of the given string is less than 3, leave it unchanged. Example:- Sample String : 'abc' Expected Result : 'abcing' Sample String : 'string' Expected Result : 'stringly' .

3) Algorithm/Flowchart (For programming based labs):

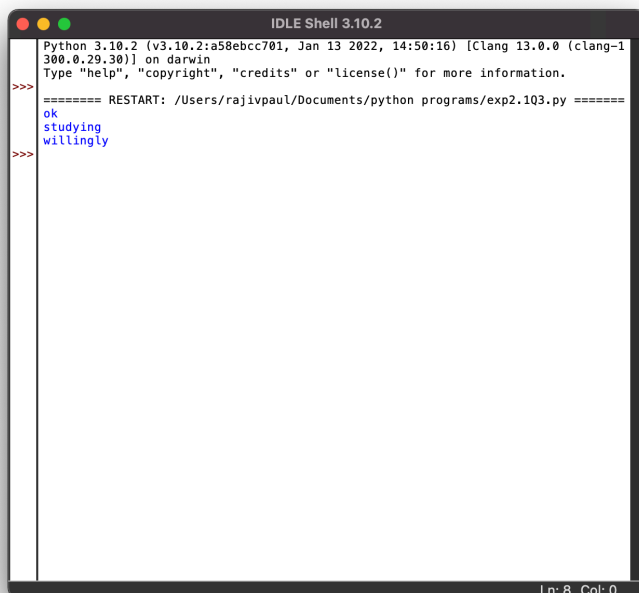
4) Steps for experiment/practical/Code:



```
exp2.1Q3.py - /Users/rajivpaul/Documents/python programs/exp2.1Q3.py (3.10...  
def add_string(str1):  
    length = len(str1)  
  
    if length > 2:  
        if str1[-3:] == 'ing':  
            str1 += 'ly'  
        else:  
            str1 += 'ing'  
  
    return str1  
print(add_string('ok'))  
print(add_string('study'))  
print(add_string('willing'))  
  
Ln: 12 Col: 6
```

5. Observations/Discussions/ Complexity Analysis:

6. Result/Output/Writing Summary:



```
IDLE Shell 3.10.2
Python 3.10.2 (v3.10.2:a58ebcc701, Jan 13 2022, 14:50:16) [Clang 13.0.0 (clang-1300.0.29.30)] on darwin
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: /Users/rajivpaul/Documents/python programs/exp2.1q3.py =====
ok
studying
willingly
>>>
```

Ln: 8 Col: 0

Learning outcomes (What I have learnt):

- 1. Learnt about python programming language.**
- 2. Learnt about strings and its different methods.**
- 3.**
- 4.**
- 5.**

Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.			
2.			
3.			