

Worksheet 2.1

Student Name :

UID:

Branch: CSE BTECH

Section/Group:

Semester: 4th

Date of Performance: 16/03/2022

Subject Name: PYTHON

1. Aim/Overview of the practical:

Python program to check whether the string is Symmetrical or Palindrome

CODE IN TEXT FORM

```
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

    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")

# Driver code
string = 'amaama'
palindrome(string)
symmetry(string)
```

```
R.PY > palindrome
1 def palindrome(a):
2
3     mid = (len(a)-1)//2
4     start = 0
5     last = len(a)-1
6     flag = 0
7
8
9     while(start <= mid):
10
11
12         if (a[start]== a[last]):
13
14             start += 1
15             last -= 1
16
17         else:
18             flag = 1
19             break;
20
21     if flag == 0:
22         print("The entered string is palindrome")
23     else:
24         print("The entered string is not palindrome")
25
26
27 def symmetry(a):
28
29     n = len(a)
30     flag = 0
31
32
33     if n%2:
```

```
R.PY > palindrome
30     flag = 0
31
32
33     if n%2:
34         mid = n//2 +1
35     else:
36         mid = n//2
37
38     start1 = 0
39     start2 = mid
40
41     while(start1 < mid and start2 < n):
42
43         if (a[start1]== a[start2]):
44             start1 = start1 + 1
45             start2 = start2 + 1
46         else:
47             flag = 1
48             break
49
50     if flag == 0:
51         print("The entered string is symmetrical")
52     else:
53         print("The entered string is not symmetrical")
54
55     # Driver code
56     string = 'amaama'
57     palindrome(string)
58     symmetry(string)
59
60
```

OUTPUT -

```
PROBLEMS  OUTPUT  TERMINAL
python -u "/Users/rajdeepjaiswal/Desktop/Codes/py practice/R.PY"
rajdeepjaiswal@Rajdeeps-Air py practice % python -u "/Users/rajdeepjaiswal/Desktop/Codes/py practice/R.PY"
The entered string is palindrome
The entered string is symmetrical
rajdeepjaiswal@Rajdeeps-Air py practice % python -u "/Users/rajdeepjaiswal/Desktop/Codes/py practice/R.PY"
The entered string is palindrome
The entered string is symmetrical
rajdeepjaiswal@Rajdeeps-Air py practice %
```

2 . Python program to find uncommon words from two Strings

CODE IN TEXT FORM

```
def UncommonWords(A, B):

    count = {}

    for word in A.split():
        count[word] = count.get(word, 0) + 1

    for word in B.split():
        count[word] = count.get(word, 0) + 1

    return [word for word in count if count[word] == 1]

A = "I AM A GOOD PERSON"
B = "YESS, I AM A GOOD PERSON"

print(UncommonWords(A, B))
```

CODE IN COMPILER –

```
Get Started | prime.py | natural.py | composite.py | R.PY | perfect.py
R.PY > UncommonWords
1
2 def UncommonWords(A, B):
3
4
5     count = {}
6
7
8     for word in A.split():
9         count[word] = count.get(word, 0) + 1
10
11
12     for word in B.split():
13         count[word] = count.get(word, 0) + 1
14
15
16     return [word for word in count if count[word] == 1]
17
18
19 A = "I AM A GOOD PERSON"
20 B = "YESS, I AM A GOOD PERSON"
21
22
23 print(UncommonWords(A, B))
24
25
```

OUTPUT –

```
PROBLEMS | OUTPUT | TERMINAL
python -u "/Users/rajdeepjaiswal/Desktop/Codes/py practice/R.PY"
rajdeepjaiswal@Rajdeeps-Air py practice % python -u "/Users/rajdeepjaiswal/Desktop/Codes/py practice/R.PY"
['YESS,']
rajdeepjaiswal@Rajdeeps-Air py practice % python -u "/Users/rajdeepjaiswal/Desktop/Codes/py practice/R.PY"
['YESS,']
rajdeepjaiswal@Rajdeeps-Air py practice %
```

3 . 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'

CODE IN TEXT FORM –

```
def add_string(str1):  
    length = len(str1)  
  
    if length > 2:  
        if str1[-3:] == 'ing':  
            str1 += 'ly'  
        else:  
            str1 += 'ing'  
  
    return str1  
print(add_string('ab'))  
print(add_string('abc'))  
print(add_string('string'))
```

CODE IN COMPILER-



```
LY.PY > ...  
1  def add_string(str1):  
2      length = len(str1)  
3  
4      if length > 2:  
5          if str1[-3:] == 'ing':  
6              str1 += 'ly'  
7          else:  
8              str1 += 'ing'  
9  
10     return str1  
11     print(add_string('ab'))  
12     print(add_string('abc'))  
13     print(add_string('string'))  
14
```



OUTPUT -

```
rajdeepjaiswal@rajdeeps-Air py practice %  
ab  
abcing  
stringly  
rajdeepjaiswal@Rajdeeps-Air py practice %  
Ln 14, Col 1
```

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.			