WORKSHEET 2.1

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Branch: CSE Semester: 4th

Semester: 4"

Subject Name: Python

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Section/Group: 801-A

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Subject Code: 21CSH-259

1. Aim:

- a. Write a python program to check whether string is symmetrical orpalindrome
- b. Write a python program to find uncommon words from two strings.
- c. 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.

2. Source Code:

(a) To check if number is symmetrical or palindrome

```
print("Name - SABHYA MAHAJAN, UID - 21BCS9200")
def is_symmetrical(s):
    n = len(s)
   for i in range(n // 2):
        if s[i] != s[n - i - 1]:
            return False
    return True
def is_palindrome(s):
    return s == s[::-1]
s = input("Enter a string: ")
if is_symmetrical(s):
    print(f"{s} is symmetrical.")
else:
    print(f"{s} is not symmetrical.")
if is_palindrome(s):
    print(f"{s} is a palindrome.")
else:
   print(f"{s} is not a palindrome.")
```

(b) Check the uncommon words

```
print("Name - SABHYA MAHAJAN, UID - 21BCS9200")
string1 = input("Enter the first string: ")
string2 = input("Enter the second string: ")
word1 = string1.split()
word2 = string2.split()
uncommonWords = set(word1) ^ set(word2)
print("Uncommon words:", ", ".join(uncommonWords))
```

(c) Adding a string at the end

```
print("Name - SABHYA MAHAJAN, UID - 21BCS9200")
strg = input("Enter a string: ")
if len(strg) >= 3:
    if strg[-3:] == "ing":
        strg += "ly"
else:
    strg += "ing"
print("Result:", strg)
```



3. Output:

a)

```
PS C:\Users\lenovo\OneDrive\Desktop\PRO\Python> & C:/Users/lenovo/AppData/Lo
cal/Programs/Python/Python311/python.exe c:/Users/lenovo/OneDrive/Desktop/PR
O/Python/first.py
Name - SABHYA MAHAJAN, UID - 21BCS9200
Enter a string: SABHBAS
SABHBAS is symmetrical.
SABHBAS is a palindrome.
PS C:\Users\lenovo\OneDrive\Desktop\PRO\Python>
```

b)

```
PS C:\Users\lenovo\OneDrive\Desktop\PRO\Python> & C:/Users/lenovo/AppData/Lo
cal/Programs/Python/Python311/python.exe c:/Users/lenovo/OneDrive/Desktop/PR
O/Python/first.py
Name - SABHYA MAHAJAN, UID - 21BCS9200
Enter the first string: I am Sabhya Mahajan
Enter the second string: Sabhya is a good guy
Uncommon words: good, am, I, Mahajan, a, is, guy
PS C:\Users\lenovo\OneDrive\Desktop\PRO\Python>
```

C)

```
PS C:\Users\lenovo\OneDrive\Desktop\PRO\Python> & C:/Users/lenovo/AppData/Lo cal/Programs/Python/Python311/python.exe c:/Users/lenovo/OneDrive/Desktop/PR O/Python/first.py
Name - SABHYA MAHAJAN, UID - 21BCS9200
Enter a string: playing
Result: playingly
PS C:\Users\lenovo\OneDrive\Desktop\PRO\Python>
```