Worksheet – 2.1

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Branch: BE-CSE (LEET)
Section/Group: 809/A
Semester: 4th
Date of Performance: 28/03/2022
Subject Name: Programming in Python Lab
Subject Code: 20CSP-259

1. Aim/Overview of the practical:

I. Python program to check whether the string is Symmetrical or Palindrome.
II. Python program to find uncommon words from two Strings.
III. 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:

I. Check whether the string is Symmetrical or Palindrome.
II. Find uncommon words from two Strings.
III. 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.

3. Steps for experiment/practical/Code:

I. Check whether the string is Symmetrical or Palindrome.

Sourse Code:

```
# Symmetrical Function
def symm(string):
  l = len(string)
  flag = 0
  if l%2 == 0:
    mid = l//2
  else:
    mid = l//2 + 1
  s1 = 0
  s2 = mid
  while(s1 < mid and s2 < l):
```

```
    if (string[s1] == string[s2]):
      s1 = s1 + 1
      s2 = s2 + 1
    else:
      flag = 1
      break
  if flag == 0:
    print("The entered string {} is symmetrical".format(string))
  else:
    print("The entered string {} is not symmetrical".format(string))

# Palindrome Function
def palin(string):
  st = 0
  end = len(string)-1
  f = 0
  while(st<end):
    if (string[st]== string[end]):
      st += 1
      end -= 1
    else:
      f = 1
      break
  if f == 0:
    print("The entered string {} is palindrome".format(string))
  else:
    print("The entered string {} is not palindrome".format(string))

# Main code
string = input("Enter the string: ")
palin(string)
symm(string)
```

II. Find uncommon words from two Strings.

Sourse Code:

```
# Iterative method
def iterate_uncommon(s1,s2):
    list_s1 = s1.split()
    list_s2 = s2.split()
    uc_words = ""
    for i in list_s1:
        if i not in list_s2:
            uc_words =  uc_words+" "+i
    for j in list_s2:
        if j not in list_s1:
            uc_words =  uc_words+" "+j
    return  uc_words

s1=str(input('Enter 1st String: '))
s2=str(input('Enter 2nd String: '))

# Print required answer
print(iterate_uncommon(s1,s2))
```

III. 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.

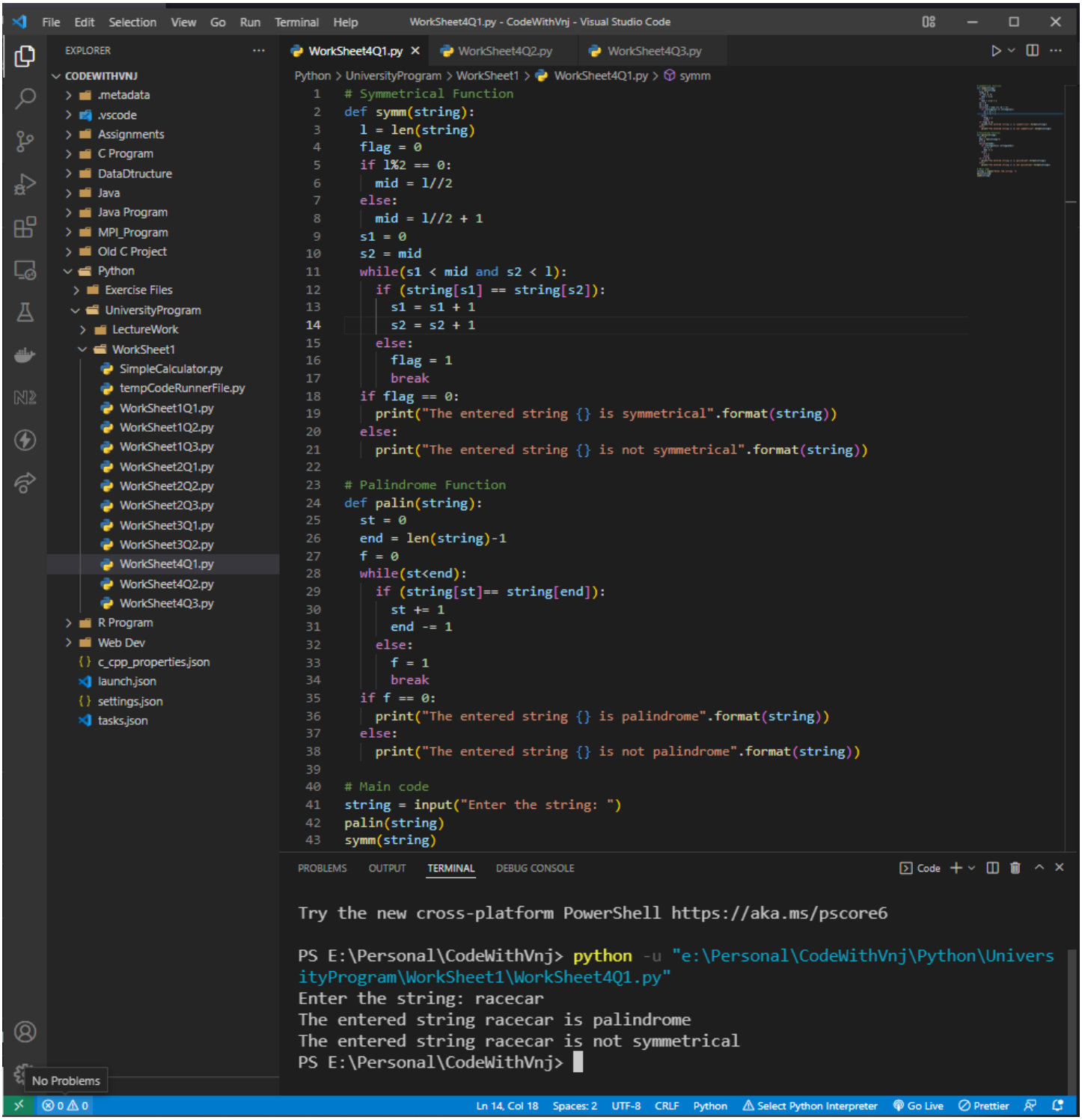
Sourse Code:

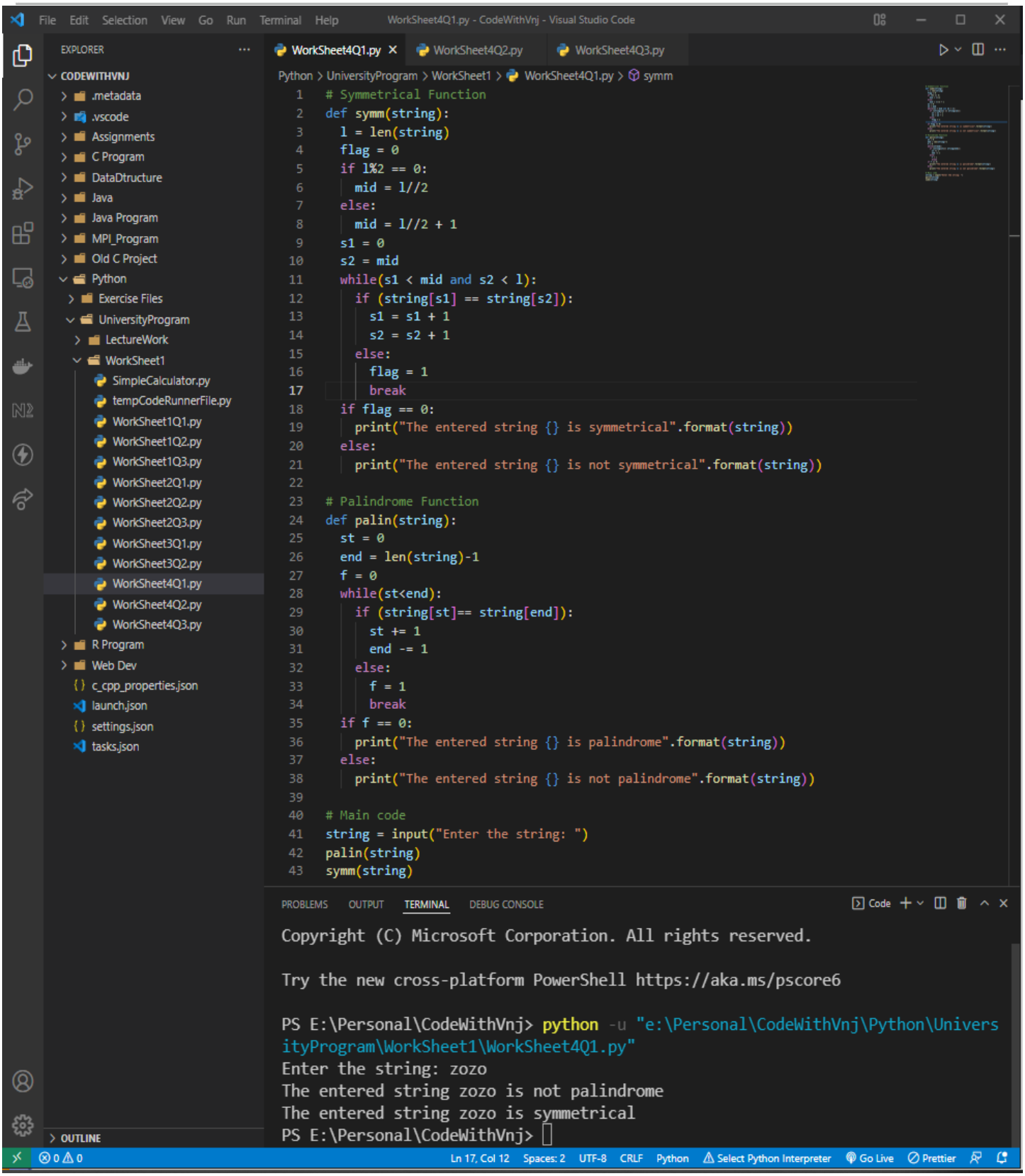
```
def inglify(string):
  if len(string) < 3:
    return string
  elif string.endswith('ing'):
    return string + 'ly'
  else:
    return string + 'ing'

string = input("Enter The String: ")
print(inglify(string))
```

4. Result/Output/Writing Summary:

I. Find area of Circle using different types of method.

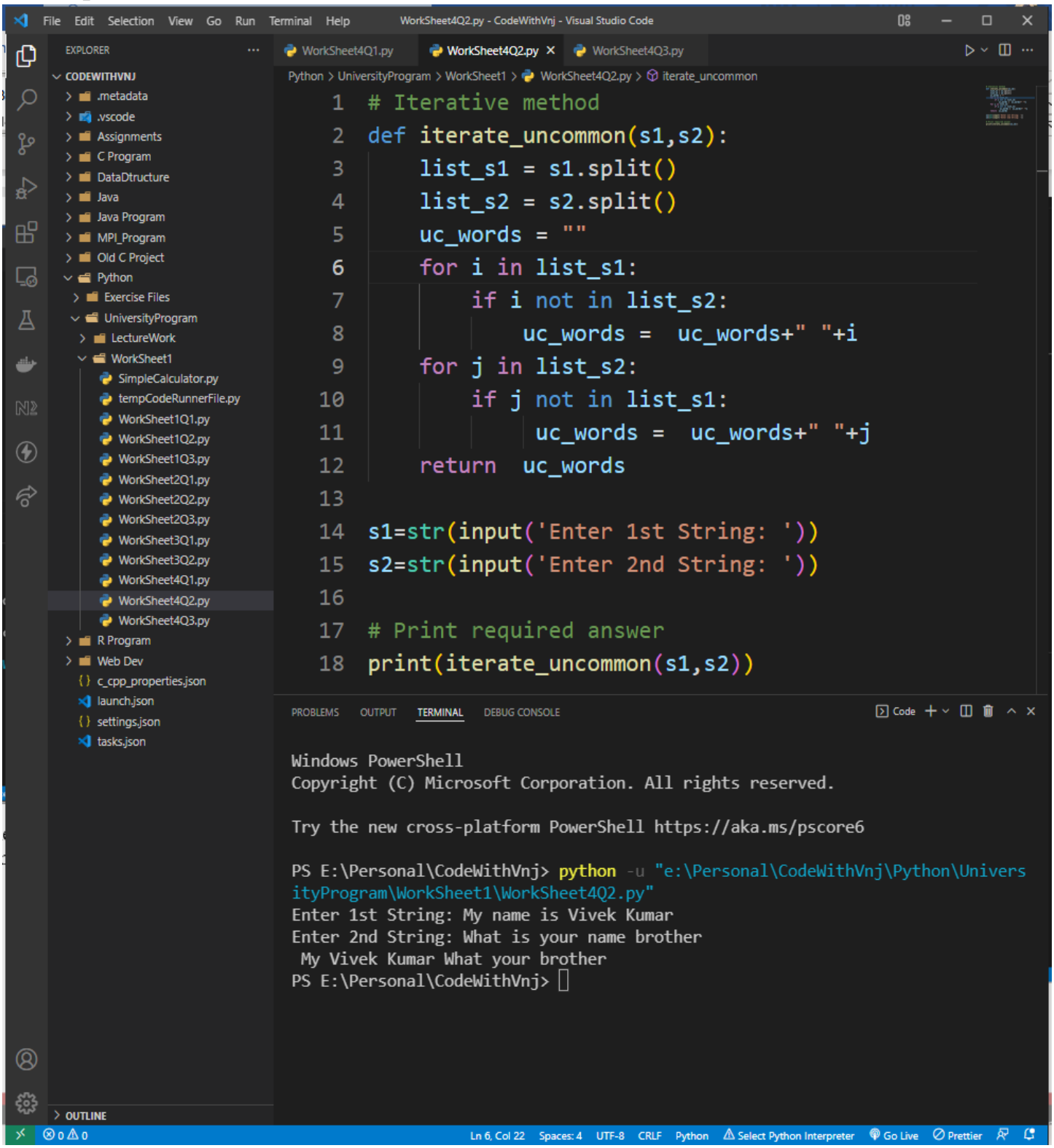
Output:




File Edit Selection View Go Run Terminal Help
WorkSheet4Q1.py - CodeWithVnj - Visual Studio Code
EXPLORER
CODEWITHVNJ
.metadata
.vscode
Assignments
C Program
DataDtructure
Java
Java Program
MPI_Program
Old C Project
Python
Exercise Files
UniversityProgram
LectureWork
WorkSheet1
SimpleCalculator.py
tempCodeRunnerFile.py
WorkSheet1Q1.py
WorkSheet1Q2.py
WorkSheet1Q3.py
WorkSheet2Q1.py
WorkSheet2Q2.py
WorkSheet2Q3.py
WorkSheet3Q1.py
WorkSheet3Q2.py
WorkSheet4Q1.py
WorkSheet4Q2.py
WorkSheet4Q3.py
R Program
Web Dev
c_cpp_properties.json
launch.json
settings.json
tasks.json
WorkSheet4Q1.py
WorkSheet4Q2.py
WorkSheet4Q3.py
Python > UniversityProgram > WorkSheet1 > WorkSheet4Q1.py > symm
# Symmetrical Function
def symm(string):
l = len(string)
flag = 0
if l%2 == 0:
mid = l//2
else:
mid = l//2 + 1
s1 = 0
s2 = mid
while(s1 < mid and s2 < l):
if (string[s1] == string[s2]):
s1 = s1 + 1
s2 = s2 + 1
else:
flag = 1
break
if flag == 0:
print("The entered string {} is symmetrical".format(string))
else:
print("The entered string {} is not symmetrical".format(string))
# Palindrome Function
def palin(string):
st = 0
end = len(string)-1
f = 0
while(st<end):
if (string[st]== string[end]):
st += 1
end -= 1
else:
f = 1
break
if f == 0:
print("The entered string {} is palindrome".format(string))
else:
print("The entered string {} is not palindrome".format(string))
# Main code
string = input("Enter the string: ")
palin(string)
symm(string)
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Code
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS E:\Personal\CodeWithVnj> python -u "e:\Personal\CodeWithVnj\Python\UniversityProgram\WorkSheet1\WorkSheet4Q1.py"
Enter the string: zozo
The entered string zozo is not palindrome
The entered string zozo is symmetrical
PS E:\Personal\CodeWithVnj>
OUTLINE
Ln 17, Col 12 Spaces: 2 UTF-8 CRLF Python Select Python Interpreter Go Live Prettier

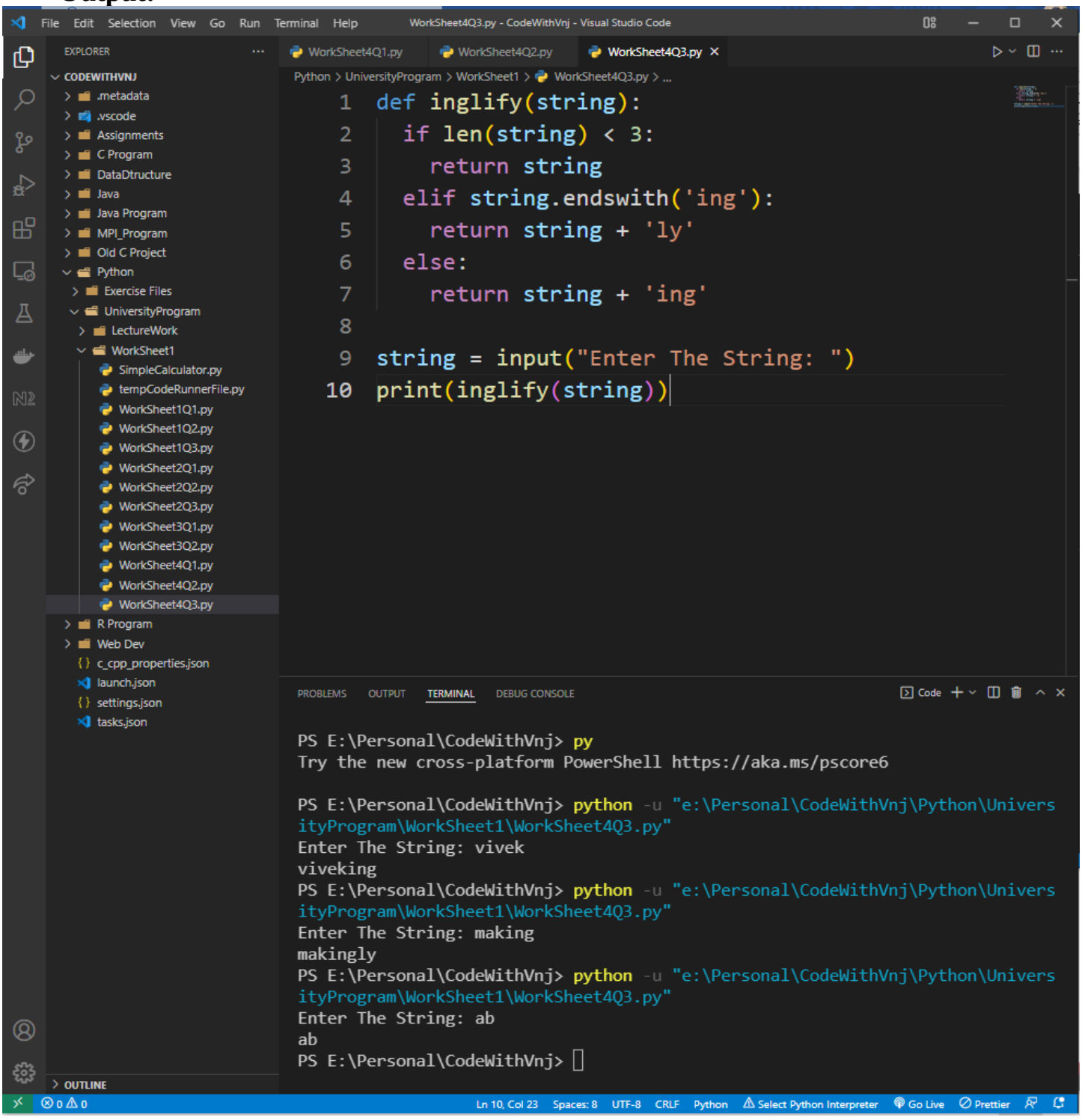
II. Find uncommon words from two Strings.

Output:



III. 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.

Output:



Learning outcomes (What I have learnt):

1. I have learnt, String Manipulation.

2. Learnt to find the Symmetrical & Palindrome String.

3. Learnt to compare the two sentences with each words.

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.			
4			