**Assignment (String\_Methods)**

**1. Write a Python program to Count all letters, digits, and special**

**symbols from the given string**

**Input = “P@#yn26at^&i5ve”**

**Output: Chars = 8 Digits = 2 Symbol = 3**

input\_str = "P@#yn26at^&i5ve"

letters = digits = symbols = 0

for char in input\_str:

if char.isalpha():

letters += 1

elif char.isdigit():

digits += 1

else:

symbols += 1

print(f"Chars = {letters} Digits = {digits} Symbol = {symbols}")

**2. Write a Python program to remove duplicate characters of a given**

**string.**

**Input = “String and String Function”**

**Output: String and Function**

input\_str = "String and String Function"

words = input\_str.split()

unique\_words = " ".join(dict.fromkeys(words))

print("Output:", unique\_words)

**3. Write a Python program to count Uppercase, Lowercase, special**

**character and numeric values in a given string**

**Input = “Hell0 W0rld ! 123 \* # welcome to pYtHoN”**

input\_str = "Hell0 W0rld ! 123 \* # welcome to pYtHoN"

uppercase = lowercase = digits = special = 0

for char in input\_str:

if char.isupper():

uppercase += 1

elif char.islower():

lowercase += 1

elif char.isdigit():

digits += 1

else:

special += 1

print(f"UpperCase : {uppercase}")

print(f"LowerCase : {lowercase}")

print(f"NumberCase : {digits}")

print(f"SpecialCase : {special}")

**4. Write a Python Count vowels in a string input= “Welcome to Python Assign”**

input\_str = "Welcome to Python Assign"

vowels = "aeiouAEIOU"

count = 0

for char in input\_str:

if char in vowels:

count += 1

print(f"Vowels count: {count}")