LAB – 9 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\_string = "P@#yn26at^&i5ve"

chars, digits, symbols = 0, 0, 0

for char in input\_string:

    if char.isalpha():

        chars += 1

    elif char.isdigit():

        digits += 1

    else:

        symbols += 1

print(f"Chars = {chars} Digits = {digits} Symbols = {symbols}")

Output

Chars = 8 Digits = 3 Symbols = 4

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

Input = “String and String Function”

Output: String and Function

input\_string = "String and String Function"

words = input\_string.split()

unique\_words = []

for word in words:

    if word not in unique\_words:

        unique\_words.append(word)

output\_string = " ".join(unique\_words)

print("Output:", output\_string)

Output

Output: String and Function

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”

Output: UpperCase : 5

LowerCase : 18

NumberCase : 5

SpecialCase : 11

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

uppercase, lowercase, numbers, special = 0, 0, 0, 0

for char in input\_string:

    if char.isupper():

        uppercase += 1

    elif char.islower():

        lowercase += 1

    elif char.isdigit():

        numbers += 1

    else:

        special += 1

print(f"UpperCase: {uppercase}")

print(f"LowerCase: {lowercase}")

print(f"NumberCase: {numbers}")

print(f"SpecialCase: {special}")

Output

UpperCase: 5

LowerCase: 18

NumberCase: 5

SpecialCase: 11

4. Write a Python Count vowels in a string

input= “Welcome to Python Assignment”

Output: Total vowels are: 8

input\_string = "Welcome to Python Assignment"

vowels = "aeiouAEIOU"

vowel\_count = sum(1 for char in input\_string if char in vowels)

print(f"Total vowels are: {vowel\_count}")

Output

Total vowels are: 8