

Python Programming Lab Assignment – 9 String Methods

Assignments Questions :

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 = 3 Symbol = 4

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

Input = "String and String Function"

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

4. Write a Python Count vowels in a string

input= "Welcome to Python Assignment"

Output: Total vowels are: 8

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 = 3 Symbol = 4

Sol :

```
string = "P@#yn26at^&i5ve"
```

```
char = sum(c.isalpha() for c in string)
```

```
digit = sum(c.isdigit() for c in string)
```

```
symbol = len(string) - char - digit
```

```
print(f"chars = {char} Digits = {digit} Symbol = {symbol}")
```

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

Input = "String and String Function"

Output: String and Function

Sol :

```
string = "String and String Function"
```

```
output = ''.join(dict.fromkeys(string))
```

```
print(output)
```

3. Write a Python program to count Uppercase, Lowercase, special character and numeric values in a given string

Input = "Hello WOrld ! 123 * # welcome to pYtHoN"

Output: UpperCase : 5 LowerCase : 18 NumberCase : 5 SpecialCase : 11

Sol :

```
string = "Hello WOrld ! 123 * # welcome to pYtHoN "
```

```
uppercase = sum(1 for char in string if char.isupper())
```

```
lowercase = sum(1 for char in string if char.islower())
```

```
numeric = sum(1 for char in string if char.isdigit())
```

```
special = sum(1 for char in string if not char.isalnum() and not char.isspace())
```

```
print("Lowercase letter = ",uppercase)
```

```
print("Uppercase Letter = ",lowercase)
```

```
print("Numeric values = ", numeric)
```

```
print("Special Character = ",special)
```

4. Write a Python Count vowels in a string

input= "Welcome to Python Assignment"

Output: Total vowels are: 8

Sol :

```
string = " Welcome to Python As Assignment"
```

```
vowelCount = 0
```

```
vowels = "aeioAEIOU"
```

```
for char in string:
```

```
    if char in vowels:
```

```
        vowelCount +=1
```

```
print("The total vowels in the given string are = ",vowelCount)
```