**Lab 4: Strings & Functions**

1. Write a Python program to calculate the length of a string (using both inbuilt method and without using the inbuilt method).
2. Write a Python program to count the number of occurrences of a given character in a string (Using both inbuilt method and without the inbuilt method).
3. Write a Python program to count the number of occurrences of each character of a given string.
4. Given two strings, s1 and s2. Write a program to create a new string s3 by appending s2 in the middle of s1.
5. Count all letters, digits, and special symbols from a given string.
6. Write a program to check if two strings are balanced. For example, strings s1 and s2 are balanced if all the characters in the s1 are present in s2. The character’s position doesn’t matter.
7. Find all occurrences of a substring in a given string by ignoring the case
8. Calculate the sum and average of the digits present in a string.
9. WAP to reverse a string using slicing operator
10. WAP to reverse a string using loops
11. Removal all characters from a string except integers
12. Apply all possible operators (+, \*, in, is, ==, >) on strings, and print the output.
13. Create a function with TWO arguments (one of them is the default argument), and call the function.
14. WAP to reverse a string using Recursion