Strings Practice

1. Write a C program to calculate the length of a string.
2. Write a C program to count the number of characters (character frequency) in a string.
   Sample String : google.com'
   Expected Result : {'o': 3, 'g': 2, '.': 1, 'e': 1, 'l': 1, 'm': 1, 'c': 1}
3. Write a C 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.
   Sample String : 'abc'
   Expected Result : 'abcing'
   Sample String : 'string'
   Expected Result : 'stringly'
4. Write a program to find index the first occurrence of a substring in string.
5. Write a program to find index of the last occurrence of a substring in string.
6. Find all indexes of a substring in a string.
7. Write a C program to create a Caesar encryption.
   Note : In cryptography, a Caesar cipher is a type of substitution in which each letter in the plaintext is replaced by a letter some fixed number of positions down the alphabet. For example, with a left shift of 3, D would be replaced by A, E would become B, and so on. The method is named after Julius Caesar, who used it in his private correspondence.
8. Write a program to generate two random numbers, one for number to shift and second to decide left or right. Encrypt the string with random numbers and then find the both numbers.
9. Write a program to generate a random password of length between 1 -5. Your program should be able to find the password using brute force attack.
10. Enter n numbers (max 10) and find their LCM using legacy method.
11. Enter a number and find whether its binary is palindrome or not.
12. Write a program in C to read any Month Number in integer and display Month name in the words.
13. Write a program in C to read any digit in integer and display in the words.
14. Write a program to enter an expression and display its result using operator precedence. (e.g., 2 + 3 + 8 – 3 * 5 -2 + 7)