# Practice Problems [25.02.2024]

**String:**

1. Write a program in C which will take a string as input and count total number of alphabets, digits and special characters in a string.
2. Write down a program that will take a word as input and will determine whether the word is palindrome or not.
3. Write down a function that compares two strings and returns 1 if they are same and returns 0 otherwise.
4. Write a C program to check whether a given substring is present in the given string. Enter a string: **This is a test string.**

Enter substring: **string**

Expected Output: ‘**string’** exists as a substring in the string.

# Pointer:

1. Using pointer arithmetic,
   1. Write a C program to take input and print elements of an array. O
   2. Write a C program to copy one array to another. E
   3. Write a program to search for an element in an array. O
   4. Write a program to print the reverse of a string. E
2. Write a function that to swaps two numbers using pointers.
3. Write a C program to access two dimensional array using pointers.

**Structure:**

1. Create a structure called "Student" with members name, age, and total marks. Write a C program to input data for two students, display their information, and find the average of total marks.
2. Create a structure named Complex to represent a complex number with real and imaginary parts. Write a C program to add and multiply two complex numbers.