CODING TASK-2

1. Check Palindrome: Implement a program that checks if a given string is a palindrome.
   Sample Input: Enter a string: racecar Output: String is a palindrome.
2. Swapping Two Variables: Implement a program to swap two variables using pointers.
3. Implement a program that accepts a 2D array (e.g., a matrix of grades for students, number of rows = number of students) and calculates the average grade for each student using a function. Pass the 2D array to the function, and handle different sizes using arguments.
4. Menu-Driven Program with Function Pointers: Implement a menu-driven program using function pointers to perform different mathematical operations on a matrix a. finding the sum of rows, b. columns, c. matrix transpose.
5. Write a C program to count the frequency of each vowel in a given string.
6. Define a structure Book with members title, author, and price. Write a program to sort an array of books in ascending order of price.
7. Write a menu-driven C program that performs the following operations using separate functions: 1) Find a substring in a string. 2) Delete a substring from the string using functions for both.
8. Find the Largest Element in Array using a recursive function.
9. Write a program to reverse a string using recursion.
10. Define a structure Student with fields: roll, name, marks[5]. Write a function that takes an array of students (via pointer) and calculates the average marks for each student. Write another function to determine and display the topper's name and roll number.