

C Language: Practice Question**Lab-1.b.****1. Printf and Scanf:**

- Write a C program to print "Welcome to C programming" using **printf**.
- Write a C program to take two integers as input and print their sum using **scanf** and **printf**.

2. Data types and Operations:

- Write a C program to perform addition, subtraction, multiplication, and division on two integers and print the results.
- Write a C program to convert a floating-point number to an integer and print the result.

3. Loops:

- Write a C program to print the first 10 natural numbers using a **while** loop.
- Write a C program to print the first 10 even numbers using a **do-while** loop.
- Write a C program to print the multiplication table of a number using a **for** loop.
- Write a C program to print the Fibonacci series up to 10 terms using a **for** loop.
- Write a C program to find the sum of the first 50 natural numbers using a **for** loop.

4. Nested Loops:

- Write a C program to print a pattern of stars in the shape of a right-angled triangle using nested loops.
- Write a C program to display a multiplication table from 1 to 10 using nested loops.
- Write a C program to create a pattern of numbers in a pyramid shape using nested loops.
- Write a C program to generate a 2D array and print its elements using nested loops.
- Write a C program to print a pattern of stars in the shape of a diamond using nested loops.

- Write a C program to implement matrix addition and print the result using nested loops.

5. If-else:

- Write a C program to check whether a number entered by the user is even or odd using if-else statements.
- Write a C program to determine whether a student has passed or failed an exam based on their marks.

6. If-else-if and Switch:

- Write a C program to check if a number entered by the user is positive, negative, or zero using if-else-if statements.
- Write a C program to determine the grade of a student based on their marks using both if-else-if and switch statements.

7. Functions:

- Write a C program that defines a function to calculate the factorial of a number and call it from the main function.
- Write a C program that defines a function to check if a number is prime or not and call it from the main function.

8. File Handling:

- Write a C program to write a string to a file using file handling functions.
- Write a C program to read a string from a file and print it on the screen using file handling functions.