

Shri G. S. Institute of Technology & Science, Indore
Department of Computer Engineering
B. tech 1st Year (Jan-June 2024) Section: All
CO10507: PROGRAMMING FOR PROBLEM SOLVING
Lab Assignment 04

Note:

1. Submissions will be in assignment pages, and should be handwritten.
2. Draw Flowchart and Write Algorithms for every Program.

Date of Experiment:

Date of Submission:

S. No.	Programs	CO
1.	Write a C program that converts temperatures between Celsius and Fahrenheit. Include functions for conversion in both directions.	CO3
2.	Write a C program to design a basic calculator that supports addition, subtraction, multiplication, and division. Implement each operation in a separate function.	CO3
3.	Write a C program to track and report student grades. The program should use functions to input grades for each student, calculate the average grade, and display a simple performance report.	CO3
4.	Write a C program using function that implements a quiz consisting of a single question with four options, one of which is correct (use Function to display the quiz question and options). Upon user input, the program should determine and display whether the provided answer is correct or incorrect. Expected Output: What is the capital of Japan? A. Beijing B. Seoul C. Tokyo D. Bangkok Your answer (enter A, B, C, or D): C Correct! Well done.	CO3
5.	Write a C Program to Find the Sum of Natural Numbers from 1 to n using Recursion. Expected Output: Enter a positive integer: 5 Sum of first 5 natural numbers is: 15	CO3
6.	Write a C Program of recursive function to find the sum of digits of a positive integer. Expected Output: Enter a positive integer: 4567 Sum of digits of 4567 is: 22	CO3
7.	Write a C Program to Find Nth Fibonacci Number using Recursion. Expected Output: Enter the value of N: 8 The 8th Fibonacci number is: 21	CO3