

Lab 2: Decisions and Loops

Due Date: 13 December 2024

Submission Instructions:

You are not allowed to submit a soft copy of the lab report. The lab report should include the following sections: Background/Theory, Implementation, Output(s), Conclusion, and Discussion. The Conclusion and Discussion sections must contain a minimum of 40 words each.

Note: This lab work will contribute **10%** towards the final internal marks in the internal practical category for the course.

Questions

1. Write a program that calculates the sum of digits of a number.
2. Write a program to generate the Fibonacci series up to a given number of terms.
3. Write a program to check if a number is a perfect number. A perfect number is one where the sum of its divisors (excluding the number itself) is equal to the number.
4. Write a program to check if a given number is a palindrome (it reads the same backward as forward).
5. Write a program to find the Greatest Common Divisor (GCD) of two numbers.