CMSC 125 Lab 04 – Simple Calculator
Programming Assignment Guidelines

Overview

This assignment requires you to complete and submit a C program that implements a simple calculator capable of performing:

- Addition

- Subtraction

- Multiplication

- Division

- Modulus (integer remainder)

- Power (exponentiation)

Your program should provide a text-based menu for selecting the operation, prompting for the appropriate inputs, performing the calculation, and displaying the result.

How the Program Works

- The program starts by displaying a menu of operations.

- You select the operation by entering its corresponding number.

- The program then asks for one or two numbers, depending on the operation.

- It performs the calculation using separate functions for each operation.

- Results are displayed with appropriate formatting.

- The program loops back to the menu until you choose to exit.

The code uses:

- Function definitions for modularity.

- Input validation to handle incorrect entries.

- A loop for repeated operations until termination.

Running the Program

1. **Compile the code:**

   gcc template.c -o lab25_<surname> -lm

   The -lm flag links the math library (needed for the power function).

2. **Run the executable:**

   ./lab25_<surname>

3. **Use the menu:**

- Enter the number of the desired operation.

- Input the requested numbers.

- View the result.

- Repeat or choose to exit.

Submission and Plagiarism Checking

- **Rename the file template.c to lab25_\<surname\>.c.**
- Push your updated .c file to your private repository.
- The system will automatically check your code for similarities to other submissions.
- You will be notified via GitHub Issues if potential plagiarism is detected.
- Review any alerts carefully and understand how to improve originality.

Academic Integrity Reminder

This system promotes fairness by detecting similar codes. Ensure your work is your own. Cheating undermines your learning and academic values.

If you have questions about the assignment or technical issues, reach out early.

Good luck and happy coding!