# u Ottawa General Engineering (GNG)

#### GNG1106 - Lab3

### Objectives:

- 1. Understand and apply conditional statements (if, else, if-else)
- 2. Utilize relational and logical operators effectively
- 3. Experiment with programming arithmetics

#### Instructions

- 1. **Pre-lab Submission(20%):** Ensure you have submitted your pre-lab before attending the lab session.
- 2. **Deliverable 1 (20%):** Create a C program that prompts the user for an integer and prints if the number is an even number or an odd number. Run the program twice with different inputs. Create a PDF file including the C code and its execution result and submit the file.
- 3. Deliverable 2 (20%): Modify the code above so that when the entered number is an even number, the printed message also indicates if it is divisible by 4. Run the program twice with different inputs. Take screenshots of the results, and save them in a PDF file along with the C code.
- **4. Deliverable 3 (30%):** Create a C program that prompts the user for an integer and prints one of the following messages depending on the entered number, and submit the C code. (There are multiple ways to do this, you are encouraged, but not obliged, to explore alternative solutions)
  - 1. "The number is neither divisible by 2 nor divisible by 3"
  - 2. "The number is not divisible by 2 but divisible by 3"
  - 3. "The number is divisible by 2 but not divisible by 3"
  - 4. "The number is divisible by 6".
- 5. **Deliverable 4 (10%):** Write a brief explanation (3-4 sentences) about any errors encountered during the lab and how they were resolved.

#### Check out and Submission

You must check out with your TA before submitting the deliverables. During the check out, your TA may inspect your work and to-be-submitted deliverables, and ask you questions to further check your understanding. At the end of the check out, your TA will give you an initial mark for the in-lab component of this lab and let you know. You must then submit the deliverables before

the due time of this lab. While this initial mark is likely to be the final, your TA reserves the right to reduce this initial mark after checking more carefully the deliverables you submit.

## **Grading Criterion:**

- · Correctness (60%): Correct syntax, logic and execution.
- Style (40%): Descriptive variables names and appropriate indentation (particularly for if and if-else statements)