

University of Mila
Faculty of Science and Technology
Department of Process Engineering

Practical Work: 02

Courses: Introduction to Programming

Level: 1st year ST - ENG & LMD

Semester 02

By:

Dr. KECITA Farouk

Academic Year: 2025/2026

Exercise 01:

Part A (Conditional Statements): Write a C program that asks the user to enter two integers and checks:

- a) Whether both numbers are positive
- b) Whether at least one number is even

Display appropriate messages for each condition.

Part B (Loop with Condition): Write a C program that asks the user to enter a positive integer N, then calculates and displays the sum of all numbers from 1 to N that are divisible by 3 **OR** divisible by 5, but **NOT** divisible by 15.

Exercise 02:

Part A (Conditional Statements): Write a C program that asks for a student's grade (0-100) and determines:

- a) If the grade is valid (between 0 and 100)
- b) If the student passes (grade ≥ 33) and whether they got distinction (grade ≥ 80)

Part B (Loop with Condition): Write a C program that asks the user to enter grades for 10 students (using a loop), and counts:

- Number of students who passed (grade ≥ 33)
- Number of students who failed (grade < 33)
- The highest grade entered

Exercise 03 (Optional):

Part A (Conditional Statements): Write a C program that asks the user to enter an integer and checks:

- a) If the number is positive, negative, or zero
- b) If the number is within the range 10 to 50 (inclusive)

Part B (Loop with Condition): Write a C program that prints the following pattern for N rows (N entered by user), but only prints numbers that are **NOT** divisible by 3:
1 2 4 5 7 8 10

Exercise 04 (Optional):

Write a C program that repeatedly asks the user to enter numbers until they enter 0. For each number entered:

- If the number is positive and even, add it to a sum
- If the number is negative and odd, count it
- Display the final sum of positive-even numbers and the count of negativ-odd numbers