University of BATNA 2

Faculty: Mathematics and Computer Science

Department : Computer Science Year of study : First Year engineer

Module: Algorithmic and Data Structures 1 Academic Year: 2023/2024

Practical work Serie 1

Exercice 1

Write a **C program** that calculates and displays the absolute value of the difference between two real numbers entered from the keyboard, without using the predefined absolute value function.

Exercice 2

Write a C program that allows you to sort and display two integer numbers (A and B) entered via the keyboard in ascending order $(A \leq B)$; A should contain the smallest value regardless of its initial value.

Exercice 3

Write a **C program** that asks the user for a child's age (in years). Then he informs him of his sporting category (using the **switch** instruction):

- "Chicken": from 6 to 7 years
- "Pupil": from 8 to 9 years
- "Minimum" : from 10 to 11 years
- "Younger": from 12 to 14 years
- "Junior" : from 15 to 17 years

Exercice 4

Write a **C program** that asks the user to enter a character, then displays whether it is an uppercase or lowercase letter. If it's not a letter, it returns an error message