Academic Year 2023/2024
Badji Mokhtar Annaba university
Bachelor Of Computer Science - First Year - S1
Algorithmics and Data Structures

TP2

- 1. Write a C program that swaps two numbers, v1 and v2, without using an intermediate variable. Debug the program step by step and observe the change in variable values.
- 2. Using the sizeof function, display the size of the following types: char, int, long, float, double, short int, unsigned int, long long int, long double.
- 3. Write a C program that tests whether a number is even or odd.
- 4. Write a C program that finds the minimum of four numbers entered via the keyboard.
- 5. Write a C program that calculates the sum of odd numbers among four numbers (even and odd) entered via the keyboard.
- 6. Using switch-case, write a C program that allows reading the type of operation to perform (+-*/%), read the operands x and y, and display the calculation result with a precision of three digits after the decimal point. (Note: the program should handle the case of division by zero).
- 7. Write a C program that calculates the ideal weight of a person based on their height entered in centimeters using the following formula: Ideal Weight (IW) = (height in cm 100) (height cm 150)/f, where f = 4 for males, f = 2.5 for females.
- 8. Write a C program that displays a menu to calculate the area of different geometric shapes (circle, rectangle, and triangle).

Note: The exercises in blue are assigned as homework and will be graded