Module: computer science 1 Level / Year: L1 (2023/2024)

PW 5: algorithm 1

- **Exercise 1:** We have three variables A, B and C. Write an algorithm transferring the value of A to B, the value of B to C and the value of C to A.
- **Exercise 2:** Write an algorithm which allows you to enter 2 integer numbers via keyboard and calculate their **sums**, **subtraction**, **product** and **division** then output the results via screen.
- **Exercise 3:** Write an algorithm that allows you to calculate the sum and the average of three given real numbers.
- Exercise 4: Write an algorithm that allows you to calculate the **total** from the **quantity** and **price**. Repeat the previous exercise to calculate the total for 4 different products.
- **Exercise 5:** Write an algorithm that allows you to calculate the **average** of three modules from the grades and coefficients of these modules.
- **Exercise 6:** Write an algorithm called CAPACITY, which converts a given number in **bits** into Bytes, Kilobytes, Megabytes and Gigabytes.
- **Exercise 7:** Write an algorithm that calculates and displays the distance between two points.
- **Exercise 8 :** Write a program that reads a number from the keyboard, responds 1 if the number is **odd** and 0 if the number is **even**.
- **Exercise 9:** Write an algorithm (program) that asks the user for a number, and then informs them if this number is positive or negative (we leave aside the case where the number is zero).
- Exercise 10: Write an algorithm that calculates the solutions of a quadratic equation, $a X^2 + b^* X + c = 0$, where a, b and c are three integers entered from the keyboard.