## 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, $\boldsymbol{a} \boldsymbol{X}^{2}+\boldsymbol{b}^{*} \boldsymbol{X}+\boldsymbol{c}=\mathbf{0}$, where $a, b$ and $c$ are three integers entered from the keyboard .

