Module: computer science 2 Level / Year: L1 (2023/2024)

PW 04: functions and subroutines

Exercise 1:

Write a function **surface** witch return the surface of a rectangle.

In the main program use the **surface** function to calculate sum of of 3 rectangles surface.

Exercise 2:

Write a sub-program **Give-Posit-Number** to force the user to enter a positive integer.

Write a function **fact** witch calculate the factorial of a positive integer number.

Write a main program program witch calculates: f = x! + y! - z!

Exercise 3:

Write a **swap** subroutine allowing you to swap the values of the two variables given as parameters.

Write a program that reverses the elements of an array T of 10 integer elements using the subroutine swap

Exercise 4:

Write a subroutine **filling**(t,n) allowing the user to fill the elements of an array t of n integers elements

Write a subroutine display(t,n) allowing you to display the elements of an array t of n integers elements

Write a program which declares 3 arrays T1, T2 and T3 of 10 integer elements then calculates the product T3= T1 *T2 (i=1,10). and display T1, T2 and T3.

using the **filling** and **display** subroutines.