

# Problems set.05

DEADLINE: 17th of March.

01.

Write a C code defines an **int** initialized with 10, then print it, then define a pointer that points to that int and change the value of the int through the pointer to be 20, then print it again.

02.

Write a C code that asks the user to enter 2 values and save them in two variables, then the program sends these variables by address to a function that returns the summation of them. The program then prints the result.

03.

Write a C code that defines 2 arrays, and sends them to a function that applies scalar multiplication between the two arrays and returns the result, the main function then will print the result.

04.

Write a C code that defines a function which takes an array as input argument and apply the bubble sorting algorithm on it, then prints the result.

05.

Write a C code that defines 3 int variables x, y and z and 3 pointers to int px, py and pz. Set x, y, z to three distinct values. Set px, py and pz to the addresses of x, y, z respectively.

Can you expect the output before you run the program ... ?

- a- Print with labels the values of x, y, z, px, py, pz, \*px, \*py, \*pz.
- b- Print the message: Swapping pointers.
- c- Execute the swap code: pz = px; px = py; py = pz;
- d- Print with labels the values of x, y, z, px, py, pz, \*px, \*py, \*pz.