

Practical Work No. 1

Exercise 1

- 1) Create the procedure **permut (int *a, int *b)** which allows the permutation of 2 integers A and B.
- 2) Redefine the procedure **permut** using argument passing by reference,
- 3) Write the function **main ()** which tests the two procedures previously tested.

Exercise 2

Using the argument initialization capability offered by the C++ language, create the prod function that calculates the product of 2, 3, or 4 integers. Validate this function on some examples.

Exercise 3

- 1) Define the Vector data structure which allows you to represent a two-dimensional vector.
- 2) Write the SacIProd function which allows you to calculate the scalar product of two vectors.
- 3) Write the main function main () which allows you to test the ScalProd function on Vectors entered on the keyboard.

Exercise 4

- 1) Write a small C++ program that allows you to manage people. A person is coded in the program as a structure with the data name and first name.
- 2) Write a ReadPers function that allows you to read a person from the keyboard.
- 3) Write a function DisplayPers which allows you to display the person on the screen.

Exercise 5

We now want to create a program that manages a certain number of people. We have chosen to dynamically manage people in the form of a linked list.

- 1) Modify the previous program to take into account the new structure.
- 2) Write an addToList function that allows you to add a person to the list.
- 3) Write a displayList function that displays all the elements of the list.
- 4) Write a function deletePersFromListe which allows you to delete a person from the list