

Problem Set 02 - Fundamentals - Part II

(Mandatory)

Write the following C++ programs in separate files such that the name of each file is in the format

`main2n.cpp`

where *n* is the number of the program in the list below.

Programs:

1. Write a program that defines a function that returns the sum of the cubes of two numbers; then, it prompts the user to enter two numbers and displays the result of the function using the inputs as arguments.
2. Write a program that defines a function that swaps the values of two strings; then, it prompts the users for two words and swaps the values of the variables by calling the function and displaying the values of the variables after the call.
3. Write a program that defines a function that checks if an integer is prime (Boolean). Afterward, it prompts the user to enter an integer, then, displays if the non-negative version of the input is prime.
4. Write a program that defines a function that initially stores values in an array parameter by prompting the user, and another function that returns the average of its array parameter elements. Afterward, it declares an array of numbers with a size of 10, calls the first function with the array as its argument, then, displays the result of the second function with the array as its argument after the call of the first function.