

# Lab 12 (Due: Jun 09)

## C++ PROGRAMMING - COSC 2321

Department of Computer Science and Electrical Engineering

Summer Session I, 2022

### Exercises

Create a **New Project** for every exercise. Take a screenshot of the source code along with its output and place the **source code** and the **screenshot** in a **zipped folder** named **LastNameFirstName\_Lab12**

#### Exercise 1

Based on Lab 11, Ex. 3, use a **pointer** to point to your object and call setter and getter functions using the pointer

#### Exercise 2

Similarly to Ex. 1 above, create a dynamically allocated object

#### Exercise 3

Similarly to Ex. 2 above, use a **smart pointer**

#### Exercise 4

Based on Lab 11, Ex. 3, create an array of 3 objects (not dynamic) and use the **pointer** (not a smart pointer) to call setter and getter functions

**Note 1:** Create one loop for calling setter functions and a another one for calling getter functions

**Note 2:** You may have to use **cin.ignore()**;

**Note 3:** Create a constructor and a destructor function and add a message in each one of the functions

#### Exercise 5

Based on Lab 11, Ex. 3, create 3 objects by overloading the constructor function thrice; make use of a **default** constructor. Assign values to the **private** members by passing parameters to the constructor functions (do not use *setters* in this exercise)

**Note:** Submit through **Canvas**