

# Lab 11 (*Due: Jun 08*)

## 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\_Lab11**

#### Exercise 1

Based on the *Class* from Lab 10, Ex. 1, create two **dynamically allocated objects**. Release memory to avoid memory leak when finished

#### Exercise 2

Create a *Class* named *Student* with **private** members: **int ID**, **string full student name**, **double HWs[3]**, **double HWaverage**. Use a **pointer** to enter values as well as to compute the **HW average**. Make use of *setter* and *getter* functions

#### Exercise 3

Create a *Class* named **Book** with three **private** members: **string title**, **unsigned int ISBN**, **double price**. Create 3 setter functions and 3 getter functions for each one of the variables. Make **setter** functions **inline**. In **main** ask user to enter values for each one of the three variables, assign values to private members using setter functions and print using getter functions

**Note 1:** Make use of **multiple files**

**Note 2:** You may have to include the following in your header file (.h) when working with **string** data types (because **string** is defined in *iostream* in the *std* namespace:

*include <iostream>*

*using namespace std;*

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