

# Homework 3 (Due: May 31)

## 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\_HW3**

#### Exercise 1

In **main**, create an empty **int vector**. Using a *standard for* loop, ask user to enter 3 values into the **vector**. Then, ask user if they wish to add more numbers into the **vector**. If Y/y, then ask user what is the size of the expanded **vector** and call **myFunction** and pass as parameters: **vector**, **initial size of vector**, **expanded size of vector**. In **myFunction** add numerals to the expanded vector and *return* to **main** the **vector**. Print the entire **vector** from within **main** using a *range-based for* loop

#### Exercise 2

In **main**, create two empty **vectors** of *string* data type. Using a *standard for* loop, that runs for 3 times, enter first names into both **vectors** (in total 6 first names). Using another *standard for* loop test whether the respective names, from the two vectors, are equal or not using a function **MACRO**. If they are equal print **Equal**, if not, print **Unequal**

#### Exercise 3

Ask user to enter a phrase or a sentence and store it into a **string** data type variable. Define and initialize a **char** pointer to point to the first element of the **string**, that is, **char\* ptr = &phrase[0]**. Get the size of the phrase entered using the function **length**, that is, **phrase.length()**. Using a loop and the **pointer** count the number of words in the phrase entered

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