## **Lab 9: Comparing Sorting Algorithm**

You may work with another student on this exercise; if you do, make sure you turn in two (2) projects with both names in the header.

Folder name: A250\_L9\_YourLastName\_YourFirstName

For this exercise, you are required to implement **Bubble sort** (**flagged** version), **Selection sort**, **Insertion sort**, and **Merge sort**. In each function, you will need to add a **variable** that keeps track of the **number of comparisons** made on the arrays already provided in the code.

Using the project **lab\_09\_comparing\_sorting\_algorithms**, implement the functions specified and run the application to view the output. The **Main.cpp** file already contains testing cases for a 6-index array and a 1000-index array.

The slides related to these topics provide some of the **code** or **pseudocode** needed for the implementation, but you are welcome to look in the Internet for coding examples (make sure the algorithms are <u>correct</u> and the sites are <u>reliable</u>).

You can view the expected output by running the **output.exe** file.