CS 441 – Fall 2019
Assignment #1
Due: 9/20/2019

Your first assignment in this course is to allow you to apply the four (4) evaluation criteria to two programming languages are familiar with through the implementation of a simple sort:

1. Write a program that sorts ten (10) integers in order from smallest to largest in **C++**. You can select the sorting algorithm of your choice to accomplish this. Let's assume that the numbers are manually typed via the keyboard into the console one at a time on separate lines.

   Below is example of a sample program run:

   > Unsorted: 10, 4, 23, 99, 7, 2, 1, 11, 44, 15
   > Sorted: 1, 2, 4, 7, 10, 11, 15, 23, 44, 99

2. Write the same program in Java (same requirements). **Note:** The same sorting algorithm used in Part I should be used in this version.

3. Compare and contrast the two programs with respect to the four criteria we discussed in class. Provide your analysis of how each language evaluates given those criteria and discuss which of the two languages is "better" in each category in your opinion. Use the criteria to justify your position.

Development Process:

The code must compile and run on Thomas (**thomas.butler.edu**). You should use good software design principles when creating your program – this includes the presence of comments throughout your code. Failure to do so will result in a lower score.

You are expected to submit a "professional" report with this submission (either a PDF or a Word document). This report should include answers and discussion to the above listed questions.

Make sure to include the Honor Pledge and Digital Signature in your source files! Failure to do so will result in a deduction of points.

Submission:

All assignments must be submitted on Butler GitHub (**github.butler.edu**). The name of your Butler GitHub repository must be as follows: **cs441_fall2019**

Make sure your repository is **private** and that I (**rrybarcz**) am added as a collaborator. Failure to do so will result in a loss of points.

The following assignment should be done individually. All work is expected to be your own.