Homework Assignment #3 – Sorting Algorithms

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Cpt S 223 – Fall 2013

**Submission Instructions:**

Submit source code (zipped) to Angel BEFORE the due date/time. If the Angel submission is not working, then submit to TA (shajiami@eecs.wsu.edu) via email BEFORE the due date/time. No late submissions will be accepted. “Angel wasn’t working” is never an excuse. Email the assignment if Angel isn’t working and make sure you email it before the due date/time or else you will be given a 0.

Optional: Include a readme.txt file in the zip with any relevant information that you want the grader to be aware of.

**Assignment Instructions:**

**Read all the instructions *carefully* before you write any code.**

Download the zip file from Angel and open the Visual Studio 2012 project included within it. Complete the implementation of the ArraySorter class functions. You must implement 3 functions in this class to cover 3 different sorting algorithms:

* insertion sort (with the capability of taking a gap value so that shell sort can use it)
* merge sort
* quick sort

The existing code is set up to generate a random number array and call the class member functions to sort it based on chosen menu options. There’s a verification function written for you to check whether or not your sorting implementations work correctly. It is called automatically in main.cpp after one of your sorting functions is called. It should be fairly self-explanatory when you run it.

You need only to complete the ArraySorter class. The main.cpp and main.h functions do not need to be modified to correctly complete this assignment.