**EECS 630 Lab 0: Quicksort**

**Objective**

* Get familiar with coding in C++ under the Linux environment (Ubuntu).
* Obtain a deeper understanding of the quicksort algorithm.
* Practice the implementation of recursive algorithms.

**Specification**

**Hints**

1. Valgrind is a widely used software to check for memory leaks and segmentation faults in C++. To install “valgrind” to your Ubuntu Linux system with the command “sudo apt install valgrind”. You will need the sudo password for your Ubuntu system.

**Testing and Grading**

We will test your implementation using the tester main function posted online. The posted input and output examples should be used for a testing purpose, while we will also use another set of inputs for grading. Your code will be compiled under Ubuntu 22.04 LTS using g++ version 11.4.0 (default) with C++11 standard.

Your final score will be determined by the success percentage of your program when fed with many random inputs. Note that if your code does not compile (together with our tester main function), you will receive 0. Therefore, it is very important that you ensure your implementation can be successfully compiled and pass the sample examples before submission.

For additional information, please read “README.txt” attached in the assignment package.

**Submission and Deadline**

Please submit your implementation as a single .h file, with a file name “MyQuicksort\_[YourKUID].h”. For example, if my KU ID is c123z456, my submission will be a single file named “MyQuicksort\_c124z456.h”. Submissions that do not comply with the naming specification will not be graded. All submissions will go through Blackboard. The deadline is Wednesday Sep 20th, 2023, 11:59PM.