

# EECS 630 Lab 01: 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 Friday Feb 23<sup>rd</sup>, 2024, 11:59PM.**