CS 3358 Assignment 3

Due: 11:55pm Thursday, Oct 25, 2018

Instructor: Kecheng Yang (yangk@txstate.edu)

Instructional Assistant: Hanie Samimi (h s163@txstate.edu)

In this assignment, you are asked to implement two fundamental sorting algorithms, namely Quick Sort and Merge Sort.

- 1. (50') Implement Merge-Sort algorithm in mergeSort.cpp, where you are expected to implement two functions, merge() and mergeSort(). You are expected to call merge() within mergeSort(), and you are not expected to declare/ implement other additional functions nor change the main() function.
- 2. (50') Implement Quick-Sort algorithm in quickSort.cpp, where you are expected to implement three functions, swap(), partition() and quickSort(). You are expected to call swap() within partition(), to call partition() within quickSort(), and you are not expected to declare/implement other additional functions nor change the main() function. OPTIONAL: If you don't need/ want to use swap() in your implementation, that is fine. Just delete/comment it.

Submission:

You should submit your work via the assignment tag in the TRACS system.

You should pack mergeSort.cpp, quickSort.cpp, and an optional README plain text file into a single .zip file to upload to TRACS. The .zip file should be named as a2_yourNetID.zip, such as a2_zz567.zip