CS 3358 Assignment 3

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 a3_yourNetID.zip, such as a3_zz567.zip