Homework #6

Quick Sort

Yunmin Go

School of CSEE

HANDONG GLOBAL UNIVERSITY

HW#6

- Write a nonrecursive version of quick sort incorporating *the median-of-three* rule to determine the pivot key.
  - **Quick sort using *median-of-three***: Our version of quick sort always picked the key of the first record in the current sublist as the pivot. A better choice for this pivot is the median of the first, middle, and last keys in the current list. Thus, $pivot=median\{K_l, K_{(l+r)/2}, K_r\}$. For example, $median\{10,5,7\}=7$ and $median\{10,7,7,\}=7$.
  - You can modify Sort.cpp and SortMain.cpp we implemented in Practice #13.

Requirements

- All of C-style functions and headers are allowed.
  - E.g., printf, fopen, fgets, etc.

- Write clean source code
  - Add proper comment in your source code
  - Consider code indentation for enhancing readability

- Submit your screenshots.

Requirements

- For unmentioned requirements, you can implement freely.
- Test your source codes with many cases for self verification.
- Upload ZIP file on LMS by compressing all your source codes and screenshots
  - File name: hw06_student id.zip (ex: hw06_20400022.zip)
- Due date: 11pm, 6/9 (Wed)