Lab 15: Merge Sort and Quick Sort

Compile with GCC 5.2.1@Ubuntu Gnome – VM workstation

With C89 ‘Standard’

**15-1.**

merge\_sort\_iterative call merge\_sort\_iterative\_util.

merge\_sort\_iterative\_util partition and merge in sequence.

Get mid & partition left, right and sort with merge

merge\_sort\_recursive call merge\_sort\_recursive\_util

merge\_sort\_recursive\_util partition and merge in recursive.

Get mid & call merge\_sort\_recursive\_util each (left to mid, mid +1 to right) with merge.

Merge

Create temp array, left, right;

For iterative, compare with left, right. Push to original array.

**15-2.**

quick\_sort call quick\_sort\_utill

switch with three type of getPivot(left, right, mid)

quick\_sort\_utill get mid with quick\_sort\_partition, and

call quick\_sort\_utill each(left to mid-1, mid to right)

quick\_sort\_partition:

set pivot by getPivot function pointer

left to less than pivot, right to more than pivot.