LAB EXERCISE

Quicksort

Assignment:

1. Type in the `quickSort` method as a separate file and save it to disk.

2. Cut and paste the `quickSort` algorithm into your sorting template program and count the number of steps needed for `quickSort`. Record the number of steps in Lab Exercise, L.A.22.1, *Quadratics* from Lesson 22.

3. Graph the number of steps of the three quadratic sorts (bubble, selection, insertion) and the recursive mergesort and quicksort on the same piece of graph paper. Plot number of steps on the vertical axis and number of data elements on the horizontal axis. It will be difficult to graph the more efficient algorithms as the number of steps are so much smaller than the quadratic algorithms. Make an estimate of where the data points occur for recursive mergesort and quicksort.

Instructions:

1. Turn in the lab exercise, L.A.22.1, *Quadratics,* with your graph.