AP Computer Science Homework #1
Searching and Sorting

DUE TUESDAY, FEBRUARY 26, 2013 by the END OF CLASS

Download the example code from the class website.

1) Write a working method for Insertion Sort.
2) Write a working method for Quicksort.
3) Write a working method for Gnome Sort.
4) Modify the existing class so that it will find the **average** number of comparisons and switches for each type of sorting algorithm (excluding Nick Sort). This means you will have to create a loop that (1) generates a random list, (2) sorts the numbers while recording the number of comparisons and switches, (3) keep a running total of comparisons and switches, and (4) calculate the average number of comparisons and switches.
5) Create a table that displays the results of your investigation.
6) (*optional*) Create your own sorting algorithm and compare it to the others.