**QuadSort**

**Create a new project called SortingAlgorithms.**

**In this new project, add three new classes from online called Sorts.java, SortingTester.java, and SortStep.java.**

Add the code for the 3 quadratic sorting algorithms to the sorting template program which I have given you. Add the appropriate lines of code to **count the number of steps** for each algorithm. The lesson provides an example of **counting for the bubbleSort method.**

Once you have the code working with the algorithms given, use the swap method in each algorithm.

Edit the Javadocs throughout the code to appropriately describe the methods.

Test each sorting algorithm for the number of steps to sort **100, 200, 400 and 800 integers**.

Record your answers below, you will turn in this lab with Lab Assignment.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Number of steps with 100 integers** | **Number of steps with 200 integers** | **Number of steps with 400 integers** | **Number of steps with 800 integers** |
| **BubbleSort** |  |  |  |  |
| **SelectionSort** |  |  |  |  |
| **InsertionSort** |  |  |  |  |