

DSA Lab 3: Sorting

Just finished my first lab! This was a fun lab to work on. I am definitely starting slow. I am also quite behind, because I had to review sorting algorithm concepts.

This lab consisted of creating an output that would make it easy to compare the runtimes of Arrays.sort(), Bubble Sort, Selection Sort, and Quicksort.

I started by converting the text files that consisted of integers into arrays. I created 4 arrays. The first array "a" was the same as the text file. "B" was sorted "a". "C" was reversed "B." And "D" was only sorting a random 10% of the integers. I then wrote the methods for all the sorting algorithms. I then wrote the datetime code to measure elapsed time. I then wrote a for loop and a switch statement to call the right method on the input file. Then, I revised my code so that the output would be in the correct format. Finally, I added the code to add the abcd text files.

How to Use:

Javac Sorting.java

Java Sorting <file> <number>

The file is the text file that contains a list of numbers. The number represents which sorting algorithm to use.

0=Arrays.Sort()

1=bubbleSort

2=selectionSort

3=quickSort