CMSC 451 Project 2

Project 2 involves writing an analysis of the results that you obtained in first project. You are to submit a paper that discusses the results of your analysis. Your paper should include the following items:

- Title Page
- Table of Contents - with the following headers and sub-headers (in CAPS)
- INTRODUCTION - A brief introduction of the sorting algorithms that you have selected and how the two algorithms compare including:
    - PSEUDOCODE - High-level pseudocode for the sorting algorithms
    - BIG- Θ - A Big-Θ analysis of the two algorithms
    - JVM WARM UP - An explanation of your approach to avoiding the problems associated with JVM warm-up
    - CRITICAL OPERATION - A discussion of the critical operation that you chose to count for each algorithm with an explanation of why you selected it
- ANALYSIS - An analysis of the results of your study, which should include:
    - GRAPH – line graph of critical operations and execution times for both algorithms
    - PERFORMANCE COMPARISON - a comparison of the performance of the two algorithms
    - CRITICAL OPERATION RESULTS AND TIME MEASUREMENTS - a comparison of the critical operation results and the actual execution time measurements
    - COEFFICIENT OF VARIATION - a discussion of the significance of the coefficient of variance results and how it reflects the data sensitivity of both algorithms
    - RESULTS vs BIG- Θ - how your results compare to your Big-Θ analysis
- CONCLUSION - A conclusion that summarizes the important observations of your study

If for any reason, it was necessary to revise the program you submitted in project 1, the revised source code should also be included along with the paper.