**CMSC 451 Project 2 - QuickSort**

[A brief introduction of the sorting algorithm that you have selected and how the two versions of the algorithm compare]

1. The Sorting Algorithm

Pseudocode

Iterative

[code]

Recursive

[code]

Big-Θ Analysis

Iterative

[analysis]

Recursive

[analysis]

JVM Warm-Up Technique

[An explanation of your approach to avoiding the problems associated with JVM warm-up]

Chosen Critical Operation

[A discussion of the critical operation that you chose to count with an explanation of why you selected it]

1. The Results

Critical Operations Count

[graph with iterative and recursive]

Execution Times

[graph with iterative and recursive exec times]

Comparisons

[a comparison of the performance of the two versions of the algorithm ]

[a comparison of the critical operation results and the actual execution time measurements ]

Coefficient of Variance

[a discussion of the significance of the coefficient of variance results and how it reflects the data sensitivity of your algorithm ]

Results vs Big-Θ analysis

[how your results compare to your Big-Θ analysis ]

1. Conclusion

[A conclusion that summarizes the important observations of your study ]