RSA Group Project

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Algorithms CSCI 3330

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# Introduction

**Member Contributions / Responsibilities**

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| Andrew Farmer | Clayton McEntire | Cameron Burdine |
| Responsibilities:  Git Hub Creation and  Main | Responsibilities:  Group Communication  Bubble/Merge Sort | Responsibilities:  Quick/CombSort |
| Contributions:  Main  Graph Output | Contributions:  Bubble Sort  Merge Sort | Contributions:  Quick Sort  Comb Sort |

The Sorting Algorithms Used

The sorting algorithms that we decided to use are, Bubble Sort, Merge Sort, Quick Sort and Comb Sort.

Bubble Sort – The bubble sort goes through the list a a number of times comparing two items side by side to see which needs moved. It will keep looping until the data is sorted into order.

Merge Sort – The merge sort recursively breaks down the problem into two or more sub problems of the same or related type until they are simple enough to be solved directly.

Quick Sort – The quick sort works by selecting a pivot element for the array and partitioning the other elements into two sub arrays according to whether they are less than or greater than the pivot point.

Comb Sort – The comb Sort improves on the bubble sort by using a gap between elements greater than one, The gap starts large and shrinks until it reaches the value of one.

Design of Experiments

Implementation and testing

Analyzing output

Summary