Mark Hyun

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Student ID: 2277731

Sorting Algorithms Analysis

Empirical analysis is simple and is dependent on software, hardware and processor of the computer. This means that if the specification of the dependent variables are insufficient, it may result in errors. Testing algorithms empirically did not require a lot of effort. I recorded the times every sorting method took and analyzed the time to complete. The unsorted data that I used to achieve the results was small. If I used large data sets I believe that there will actually a bigger difference in terms of run time and efficiency. The fastest algorithm tested was the bubble sort method, and had the quickest time at .0002. However, it is important to note that while it is the fastest algorithm, the other sorting algorithms were only slower by a few milliseconds. A large data set, would results in the difference speed with each sorting method may be more drastic. Even though, bubble sort is recorded fastest with this data set, I think with a large data set, the speed of bubble sort would slow down because it sorts by individual elements, where as other methods would yield a must faster time.