

OBSERVATIONS OF THE QUICKSORT CUTOFF VALUE ON SORTED DATA -- AN EXPERIMENTAL ANALYSIS

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ABSTRACT

Sorting routines are perhaps the most frequently used algorithms by computer programmers. From teaching the basics of a programming language to building relational databases, all programmers are exposed to different techniques. Instead of simply applying these techniques as they were presented, a data structures and algorithms class I was attending was given the assignment of comparing expected to actual performance. While testing these routines for best and worst case scenarios a stepping effect appeared on some of the graphs I was creating. This stepping would turn out to be a reproducible occurrence determined by the cutoff value used in the quicksort routine. I used this finding to experiment with analyzing an algorithmic anomaly.