Ben Pung

Prof Orduz

October 1 2023

Advanced Algorithms

2.8

The lessons on optimality were helpful for me as a student because it offered examples on how to make assumptions for run times. Making assumptions in all lines of work is critical and by giving the students examples of how to look at algorithms it will be helpful to evaluate other algorithms the future.

Now, when we look at the actual benefit of finding an optimality for insertion or quicksort the reason, we would do this is to help show the difference between worst case and best case. The optimality lessons for these algorithms were important to show that not every algorithm is static in its runtime and there may be situations between a lower and upper bound for runtime. By getting experience in doing this we will be better suited to make assumptions, find the best case, and find the worst case using mathematical analysis in the future.