

Through my implementation of the four algorithms and observing them, I didn't find drastic differences between the sorting times. Insertion sort took less time because the data was partially sorted at points. This method however fails to compute larger data sets. Quick sort took the least amount of time, due to the way it is constructed and its space optimization. Selection sort was the slowest due to its $O(n^2)$ runtime and wasn't ideal. I'm sure there are more efficient ways of implementing these sorting algorithms, Python would be a more ideal language for me to use on this assignment because it is simpler and more intuitional.