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Assignment 6

Overall, the time differences were not as drastic as I expected. I knew initially that some of the sorting algorithms were better than others in some cases, but I didn't know the degree to it. When picking one algorithm over another, there are several trade-offs to keep in mind. One is how much memory is available for the computer to use. If there is not enough free memory, the algorithm may run slower than usual, so it's important to pick one that may not need as many resources as another. Furthermore, if one wanted to sort something as fast as possible, it may result in more errors occurring, as less time is being spent on the individual item.

My choice of programming language was c++, which may have affected the results negatively because it requires the user to manage the computer's memory. This empirical analysis gives insight into the structural integrity of the sorting algorithms, but is only ideal for showcasing them working on one task. Therefore this may not be the best representation of the sorting algorithms speed, since multiple examples would be needed to test the full speeds of the sorting algorithms.