

Bubble Sort and Selection Sort are both very inefficient ways of sorting data. According to this lab, Bubble Sort is the most inefficient when the data is unsorted. In the worst case Bubble Sort has an $O(n^2)$ complexity. However, if Bubble Sort is optimized and used in a sorted list its complexity can be as fast as $O(N)$. For unsorted data Selection Sort is more efficient than Bubble Sort but in the worst case, Selection Sort also has a complexity of $O(n^2)$. If we need to sort a large set of data efficiently, we should use one of the other sorting algorithms.