**Lab 6**

The advantages of sorting lay in its massive efficiency in dealing with a huge list of items because sorting sorts in place no additional storage is required as well. Its disadvantage is that in the worst-case its performance is similar to average performance of bubble, insertion, or selection sorts. Binary search has an advantage over binary search tree is its time complexity; binary search is much quicker than a linear search since the data is halved each step. On the other hand, because of how binary search works it loses efficiency with smaller list and the list must be sorted for it to be used correctly.