

Examining the data generated, TreeSet are significantly slower than HashSet in completing the operation of inputting new data. The reason for this is that when a TreeSet has something inserted into it, it gets inserted in order while a HashSet has no sorting or order, making it faster to insert data into. TreeSet are also significantly slower than HashSet in searching. HashSet has a performance time of  $O(1)$ , constant, in inserting, deleting, and searching. HashSet, therefore, is the superior of the two data structures as the run time of a TreeSet with the insert(add()), delete(remove()), and search(contains()) operations is  $O(\log n)$ .