

Reflective Report

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As a Computer Science student studying a fully dedicated course for Data Structures and algorithms for the first time, this first assignment provided an interesting application on this topic accompanied with an opportunity to understand and develop the concepts through the means of programming.

The division of work had me in charge of the Binary Search Tree topic question. The question was mainly to provide an algorithm to convert a sorted array to a binary search tree. The question had me program an implementation of a binary search tree in Java programming language. This is the first time I had a question that required me to step-up my Data Structures level to a concept outside of arrays and linked-lists that were previously learned. and it provided me a refresher on recursive methods in programming as part of converting the sorted array to binary search tree.

The question has also provided me an opportunity to revise the Big-O for the Binary Search Tree and fully understand and explain why the Big-O of searching a Binary Search Tree is $O(\log n)$.

To conclude, my contribution to this coursework was divided into the three parts of question 2a: Programming, writing a pseudocode to represent the program, and explaining what lies behind the $O(\log n)$ of BST.