

# Stage 03

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December 2019

## 1 Stage 01

In Stage 01 code, I created methods of find, size, inorder, and insert. The insert method allows the user to insert values to the tree without duplicates and the size method is used in the find method to look for a node with a index number.

## 2 Stage 02

In Stage 02 code, I created the inorder method to sort the tree nodes into an arraylist and in ordered and decreased the speed of find method from stage 01 code that now it first sort the tree nodes in ordered into an arraylist and find the node value with the index inputed.

## 3 Result

The find method of Stage one used 19329900 nanoseconds while the Stage two find method took 650500 nanoseconds.