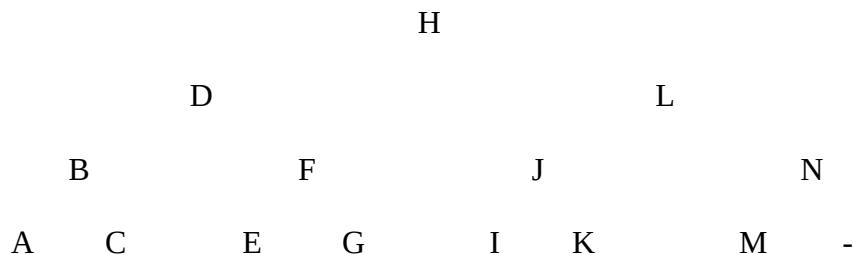


Homework assignment number 13

Binary search trees have their best performance when they are balanced, which means that at each node n , the size of the left subtree of n is within one of the size of the right subtree of n . Write a program that will take an array of generic values that are in sorted order in the array, create a binary search tree, and put the values in the array into the tree. Your binary search tree should be complete (“complete” as defined in chapter 24). Or put another way, it should have the fewest number of levels and still be “complete”.

Use the following array: “A”, “B”, “C”, “D”, “E”, “F”, “G”, “H”, “I”, “J”, “K”, “L”, “M”, “N”. Remember, your code is to handle generic data types, not just strings. So while I want you to use the specified array of strings, your program should work if I choose to use an array of Integers, or Characters.

Printout the values from the tree (not the array) in a tree fashion so that I can readily see the tree structure, something like this:



Name the file that contains the main method `TreeDriver.java`.

Also, use any of the files in the `wk14.zip` file that you wish, it should make this much easier if you do.