

lab04 Binary Search Tree Node Deletion

The Problem

Refer to the two versions of delete() methods found in the file `BinarySearchTree.java`, implement the two versions of `deletePrime()` methods so that when an element is to be deleted, the leftmost element in the right subtree will be used as a replacement instead of the rightmost element in the left subtree.

You will need to provide the method `findSmallestChild` instead of `findLargestChild`. Study the given code carefully before modification.

Program Development

The test driver `TestBinarySearchTree.java` is given to test the working of these methods. The test driver should not be modified. Its output is as follows:

Add to beginning and end of list.

-1 9 18 83 104 129 157 173 176 221 223 230 236 288 308 350 358 365 436 455 488 501

Remove first, last, and middle elements.

9 18 83 104 129 157 173 176 221 223 236 288 308 350 358 365 436 455 488

Initial shape as expected

After deletePrime(3) shape as expected

After deletePrime(2) shape as expected

Submission

Zip the solution folder of all the source files and name it

Lab04g<YourLabGroupNo><YourMatricNo>.zip. Submit the zip file into the correct folder in your group's workbin.