CS 62 Quiz 5

February 27, 2015

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

We want to add a method, printLeftBranch, to the BinaryTree class. This method prints (using System.out.println) the values of the nodes along the left branch of the tree. Recall that binary trees have methods:

 public BinaryTree<E> left() {…}
 public BinaryTree<E> right() {…}
 public void setLeft(BinaryTree<E> newLeft){…}
 public void setRight(BinaryTree<E> newRight){…}
 public E value(){…} // returns value at root
 public boolean isEmpty() // returns if tree is empty

Recall that binary trees have the following instance variables:

 protected E val; // value associated with node

 protected BinaryTree<E> parent; // parent of node

 protected BinaryTree<E> left, right; // children of node

Complete the following method definition for printLeftBranch. For full points, your method should be recursive.

// print all elements on the leftmost branch of this tree

public void printLeftBranch() {