public static <T> int size(BinaryTree<T> tree) {

BinaryTree<T> leftSubtree = tree.newInstance();

BinaryTree<T> rightSubtree = tree.newInstance();

int totalSize = 0;

if (tree.height() != 0) {

T root = tree.disassemble(leftSubtree, rightSubtree);

totalSize = 1 + size(leftSubtree) + size(rightSubtree);

tree.assemble(root, leftSubtree, rightSubtree);

}

return totalSize;

}

public static <T> int size(BinaryTree<T> tree) {

int totalSize = 0;

for (T element : tree) {

totalSize++;

}

return totalSize;

}