Assignment 4: Multi-node trees for pyramid scheme

LinkedTree:

**getRootElement()** – for getrootelement I had to return the element store at the root so I just did return root.getElement().

**addChild()- (Part 1) First ones had T parent and T child as the parameter, I had to make a parent node (MultiTreeNode<T> parentNode = findNode(parent)), and then add the child in that node (addChild( parentNode, child))**

**(part 2) In the second add child I had MultiTreeNode<T> parentNode and T child as parameter. First I had to check if the parent node and the child is null ( if ( parentNode == null || child == null) ), then I created a child node ( MultiTreeNode<T> childNode = new MultiTreeNode<>(child) ), after that I added the child node as the children of the parent Node ( parentNode.getChildren().add(childNode) ).**

**Contains ()- it tries to find a node that has target and if it doesn’t find the node it returns false, if it does find the node it returns true (return (findNode(target) == null) ? false : true)**

**countDown() – first I had to check that the node is not null, if it was null it would return 1 ( if (node == null) return 0 ), then I had to check it if the node had children, I it did I returned 1 ( if (node.getNumChildren() == 0) return 1 ), then then I created a for loop to count the children and save it into int count so I could return count.**

**I promise that I completed this project on my own and did not look at, borrow from or copy project code from a classmate or anyone who took the course before. All the code in this project (except what was given by the instructors) was written by me.**

**Describe any help you received on this project (from a professor or TA or the tutoring center):**

**-Videos in the assignment**

**Signature: Ramesh Koirala                                                                      Date: 12/13/2020**