

Data Structures & Algorithms

Lab Exercise 7 – Binary Tree Project (Part 3)

Due: to be demonstrated by week 21 (wk beginning 18-Feb)

Learning outcomes

At the end of this lab you should be able to:

- Describe and implement the different cases for deleting a node from a binary tree.
-

Write the implementation of a `LinkedBinaryTree` member function:

```
void deleteItem( Iterator const & position );
```

to locate and delete the specified node from the tree. Refer to the algorithm for `deleteItem` in lecture 21 (slides 19 to 21).

Make sure to handle to the three different edge cases (deleting a leaf node, deleting an internal node with one child node, deleting an internal node with two child nodes).

Test your implementation by calling one of the traversal methods (e.g. `inorder`) after deleting a node.