Binary Tree Deletion Algorithm

In this document, we illustrate the deletion process of a binary tree. The algorithm used for deleting a node involves the following steps:

- Finding the Node: We first perform a level-order traversal (breadth-first search) to locate the node to be deleted and the deepest node in the tree.
- Replacing Data: We replace the data of the node to be deleted with the data of the deepest node.
- Deleting Deepest Node: We then delete the deepest node from the tree.

Deletion Steps

The following figures illustrate the binary tree at various steps of the deletion process.

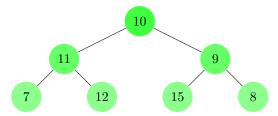


Figure 1: Step 1 (Initial tree)

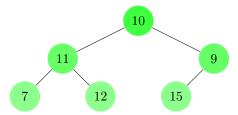


Figure 2: Step 2

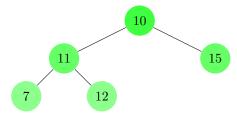


Figure 3: Step 3

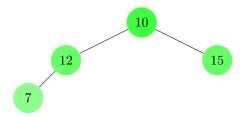


Figure 4: Step 4