Review common tree terminology with the following exercises:

- What’s the longest **English word** you can make using the vertex labels in the tree (repeats allowed)?
- Find an **edge** that is not on the longest path in the tree. Give that edge a reasonable name.
- One of the vertices is called the **root** of the tree. Which one?
- How many parents does each vertex have?
- Which vertex has the fewest **children**?
- Which vertex has the most **ancestors**?
- Which vertex has the most **descendants**?
- List all the vertices in b’s left **subtree**.
- List all the **leaves** in the tree.

**Definition: Binary Tree**

A binary tree T is either:

**Tree Property: Tree Height**

**Tree Property: Full**

**Tree Property: Perfect**
Theorem: If there are \( n \) data items in our representation of a binary tree, then there are ____________ NULL pointers.

Traversals:

One Algorithm, Three Traversals:

A Different Type of Traversal

Strategy:

```cpp
void BinaryTree<T>::levelOrder(TreeNode * root) {
    // Level order traversal code here
}
```