Quiz #8: Trees

Read over the header and docstring for method `insert_child`:

class Tree:
    _root: Optional[Any]
    _subtrees: List[Tree]

    ... # Other methods omitted

def insert_child(self, item: Any, parent: Any) -> bool:
    """Insert <item> into this tree as a child of <parent>.
    If successful, return True. If <parent> is not in this tree, return False.
    If <parent> appears more than once in this tree, <item> should only
    be inserted once (you can pick where to insert it).
    """

1. Implement this method in the space below. Remember that this method is mutating, but it also returns a boolean to indicate whether the given item was actually inserted or not.

2. If a tree has multiple instances of `parent`, where will your implementation insert `item`? Draw a small example to illustrate this.

If you need more space, continue on the back of this page.