OLAJESU DOMINION
22CD009451

INSERT OPERATION

```
class Node:
    def __init__(self, data):
        self.data = data
        self.leftChild = None
        self.rightChild = None

class BinaryTree:
    def __init__(self):
        self.root = None

    def insert(self, data):
        new_node = Node(data)

        # If the tree is empty
        if self.root is None:
            self.root = new_node
        else:
            current = self.root
            parent = None

            while True:
                parent = current

                # Go to the left of the tree
                if data < parent.data:
                    current = current.leftChild

                    # Insert to the left
                    if current is None:
                        parent.leftChild = new_node
                        return
                else:  # Go to the right of the tree
                    current = current.rightChild

                    # Insert to the right
```

```
            if current is None:
                parent.rightChild = new_node
                return
```

SEARCH OPERATION

```
class Node:
    def __init__(self, data):
        self.data = data
        self.leftChild = None
        self.rightChild = None

class BinaryTree:
    def __init__(self):
        self.root = None

    def search(self, data):
        current = self.root
        print("Visiting elements: ", end="")

        while current is not None and current.data != data:
            print(current.data, end=" ")

            # Go to the left subtree
            if data < current.data:
                current = current.leftChild
            # Go to the right subtree
            else:
                current = current.rightChild

        # Return the found node or None if not found
        return current
```