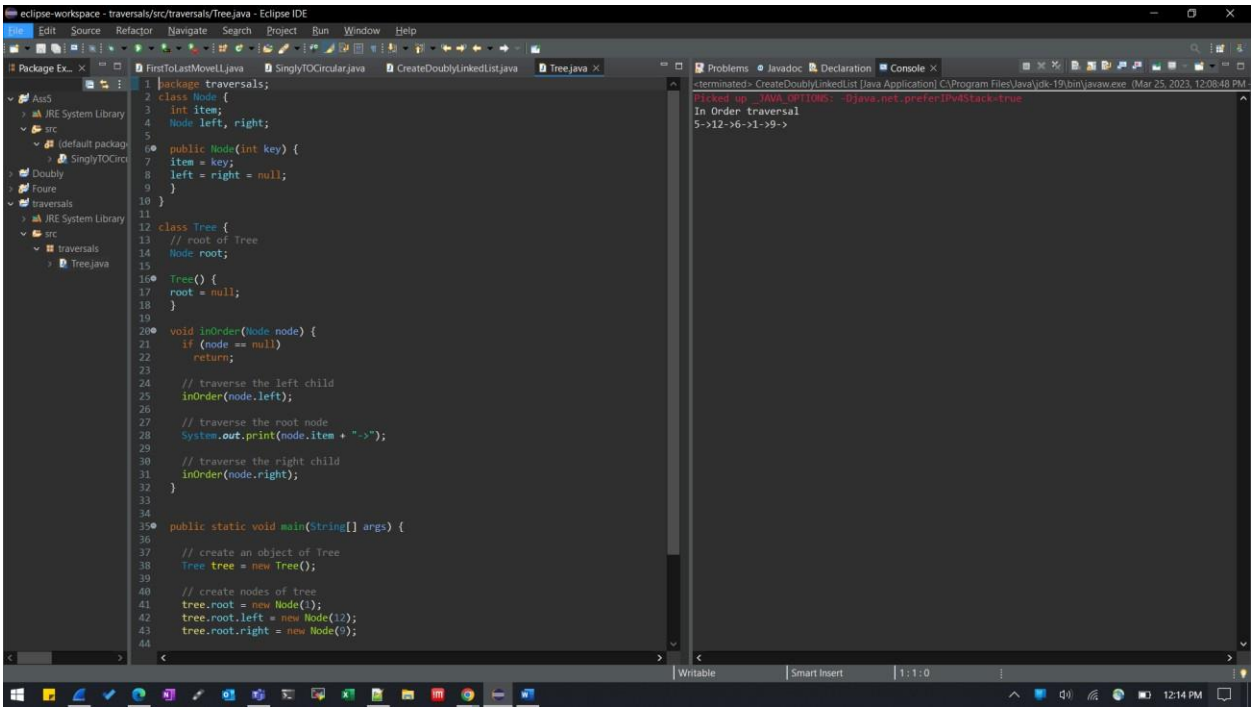
LAB SHEET 6

Aim: To understand the concepts of Tree data structure and its traversals.

1. Implement a program for different tree traversals.




```
package traversals;

class Node {

int item;

Node left, right;

public Node(int key) {

item = key;

left = right = null;

}

}

class Tree {
```

```
// root of Tree

Node root;

Tree() {

root = null;

}

void inOrder(Node node) {

if (node == null)

return;

// traverse the left child

inOrder(node.left);

// traverse the root node

System.out.print(node.item + "->");

// traverse the right child

inOrder(node.right);

}

public static void main(String[] args) {

// create an object of Tree

Tree tree = new Tree();

// create nodes of tree

tree.root = new Node(1);

tree.root.left = new Node(12);

tree.root.right = new Node(9);

// create child nodes of left child

tree.root.left.left = new Node(5);

tree.root.left.right = new Node(6);
```

```
System.out.println("In Order traversal");

tree.inOrder(tree.root);

}

}
```