**Lab Program 5:**

**A function to implement the insert operation in 2-3 Tree**

void insert(node \*candidate, t \*key) { //Here key is the element to be inserted in the candidate

if(candidate == nullptr) {

root = new node(key);

return;

}

if(candidate->isleaf()) {

candidate->store(key);

}else {

if(\*candidate->firstkey > \*key) {

insert(candidate->less, key); //Insert to left subtree.

}else if(\*candidate->firstkey <= \*key && candidate->is2node()) {

insert(candidate->btwn, key); //Insert to mid subtree.

}else {

if(\*candidate->secondkey > \*key) {

insert(candidate->btwn, key); //Insert to mid subtree.

}else {

insert(candidate->great, key); //Insert to right subtree.

}

}

}

split(candidate); //This function is to balance the tree incase of an overflow.

}