Lab-10 Trees

```
struct node
{
    int data;
    struct node *left;
    struct node *right;
};
struct node* getNewNode(int data)
{
    struct node *newnode = (struct node *) malloc
                           (sizeof(struct node));
    newnode->data = data;
    newnode->left = newnode->right = NULL;
    return newnode;
}
struct node *insert(struct node *root, int data)
{
    if(root == NULL)
    {
        root = getNewNode(data);
    }
    else if(data <= root->data)
    {
        root->left = insert(root->left, data);
    }
    else
    {
        root->right = insert(root->right, data);
    }
    return root;
}
```

```
void preorder(struct node* root)
{
    if(root == NULL)
    {
        return;
    }
    printf("%d", root->data);
    preorder(root->left);
    preorder(root->right);
}
void inorder(struct node *root)
{
    if(root == NULL)
    {
        return;
    }
    inorder(root->left);
    printf("%d", root->data);
    inorder(root->right);
}
void postorder(struct node* root)
{
    if(root == NULL)
    {
        return;
    }
    postorder(root->left);
    postorder(root->right);
    printf("%d", root->data);
}
```