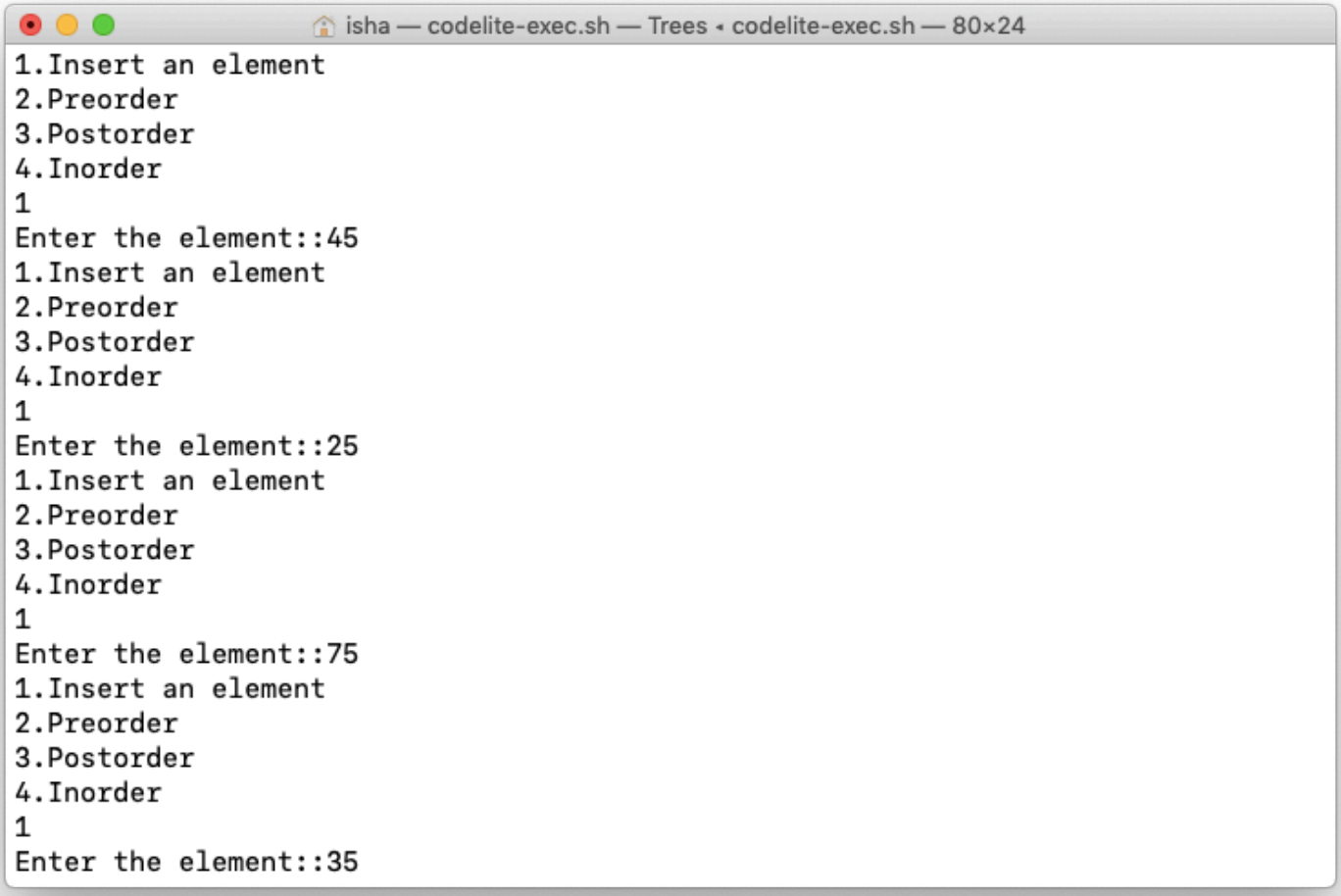
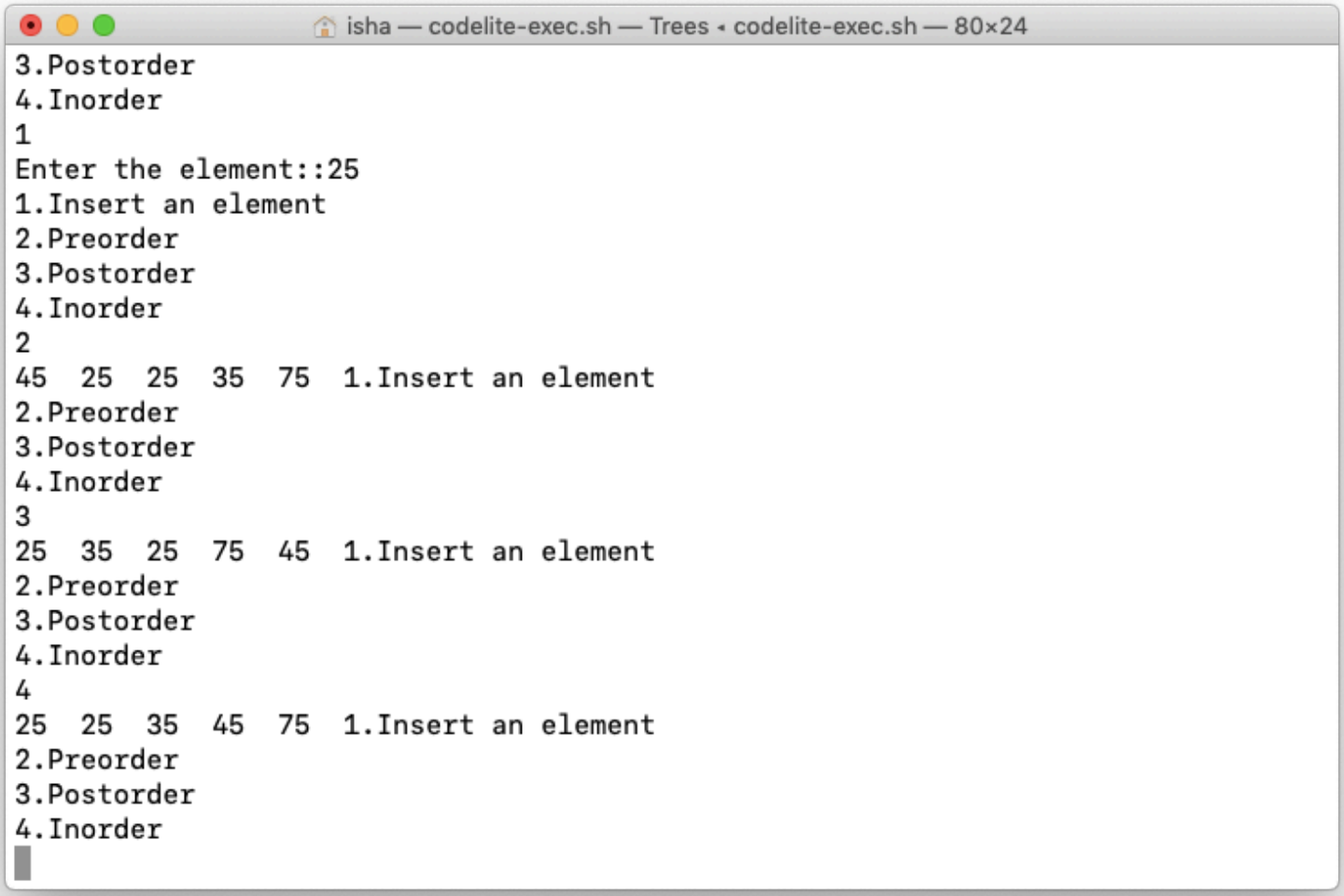
```
#include <stdio.h>
#include <stdlib.h>
struct node
{
    int data;
    struct node * left;
    struct node * right;
};
struct node * getNewNode(int data)
{
    struct node * newnode=(struct node *)malloc(sizeof(struct node));
    newnode->data=data;
    newnode->left=newnode->right=NULL;
    return 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);
}
int main(int argc, char **argv)
{
    int ch;
    int ele;
    struct node *root=NULL;
    do
    {
        printf("1.Insert an element\n2.Preorder\n3.Postorder\n4.Inorder\n");
        scanf("%d",&ch);
        switch(ch)
        {
            case 1:printf("Enter the element::");
            scanf("%d",&ele);
            root=insert(root,ele);
            break;
            case 2:preorder(root);
            break;
            case 3:postorder(root);
            break;
            case 4:inorder(root);
            break;
        }
    }while(ch<=4);
         return 0;
}
```


isha — codelite-exec.sh — Trees • codelite-exec.sh — 80×24
1.Insert an element
2.Preorder
3.Postorder
4.Inorder
1
Enter the element::45
1.Insert an element
2.Preorder
3.Postorder
4.Inorder
1
Enter the element::25
1.Insert an element
2.Preorder
3.Postorder
4.Inorder
1
Enter the element::75
1.Insert an element
2.Preorder
3.Postorder
4.Inorder
1
Enter the element::35


isha — codelite-exec.sh — Trees ◂ codelite-exec.sh — 80×24
3.Postorder
4.Inorder
1
Enter the element::25
1.Insert an element
2.Preorder
3.Postorder
4.Inorder
2
45 25 25 35 75 1.Insert an element
2.Preorder
3.Postorder
4.Inorder
3
25 35 25 75 45 1.Insert an element
2.Preorder
3.Postorder
4.Inorder
4
25 25 35 45 75 1.Insert an element
2.Preorder
3.Postorder
4.Inorder