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#include <stdio.h>
#include <stdlib.h>
typedef struct Node {
    int data;
    struct Node* left;
    struct Node* right;
} Node;
Node* createNode(int value) {
    Node* newNode = (Node*)malloc(sizeof(Node));
    if (newNode == NULL) {
        printf("Memory allocation failed\n");
        exit(1);
    }
    newNode->data = value;
    newNode->left = newNode->right = NULL;
    return newNode;
}
Node* insert(Node* root, int value) {
    if (root == NULL) {
        return createNode(value);
    }
    if (value < root->data) {
        root->left = insert(root->left, value);
    } else if (value > root->data) {
        root->right = insert(root->right, value);
    }
    return root;
}
void inorder(Node* root) {
    if (root != NULL) {
        inorder(root->left);
        printf("%d ", root->data);
        inorder(root->right);
    }
}
void preorder(Node* root) {
    if (root != NULL) {
        printf("%d ", root->data);
        preorder(root->left);
        preorder(root->right);
    }
}
void postorder(Node* root) {
    if (root != NULL) {

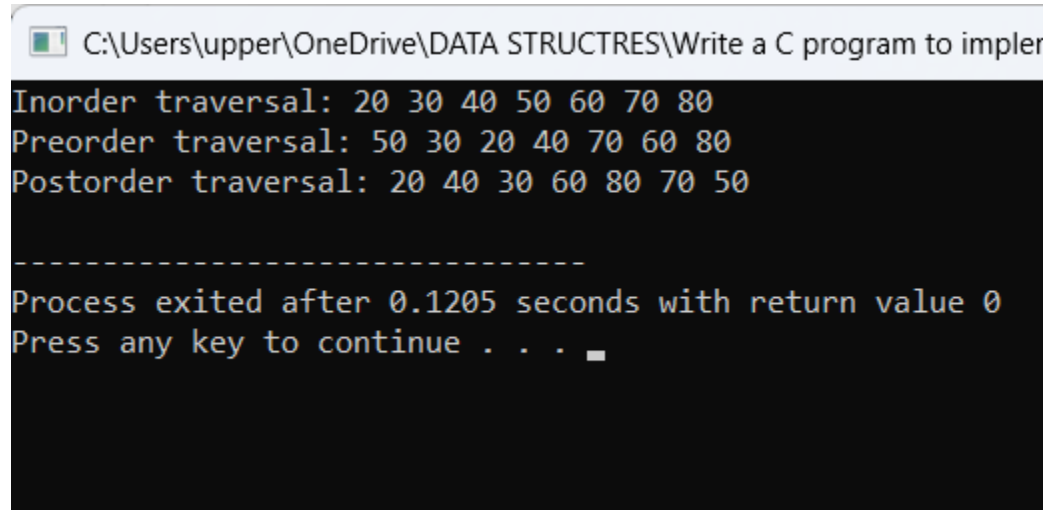
```

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        postorder(root->left);
        postorder(root->right);
        printf("%d ", root->data);
    }
}

int main() {
    Node* root = NULL;
    root = insert(root, 50);
    insert(root, 30);
    insert(root, 20);
    insert(root, 40);
    insert(root, 70);
    insert(root, 60);
    insert(root, 80);
    printf("Inorder traversal: ");
    inorder(root);
    printf("\n");
    printf("Preorder traversal: ");
    preorder(root);
    printf("\n");
    printf("Postorder traversal: ");
    postorder(root);
    printf("\n");
    return 0;
}

```



```

C:\Users\upper\OneDrive\DATA STRUCTRES\Write a C program to imple...
Inorder traversal: 20 30 40 50 60 70 80
Preorder traversal: 50 30 20 40 70 60 80
Postorder traversal: 20 40 30 60 80 70 50

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Process exited after 0.1205 seconds with return value 0
Press any key to continue . . .

```