

```

// Tree traversal in C

#include <stdio.h>
#include <stdlib.h>

struct node {
    int item;
    struct node* left;
    struct node* right;
};

// Inorder traversal
void inorderTraversal(struct node* root) {
    if (root == NULL) return;
    inorderTraversal(root->left);
    printf("%d ->", root->item);
    inorderTraversal(root->right);
}

// preorderTraversal traversal
void preorderTraversal(struct node* root) {
    if (root == NULL) return;
    printf("%d ->", root->item);
    preorderTraversal(root->left);
    preorderTraversal(root->right);
}

// postorderTraversal traversal
void postorderTraversal(struct node* root) {
    if (root == NULL) return;
    postorderTraversal(root->left);
    postorderTraversal(root->right);
    printf("%d ->", root->item);
}

// Create a new Node
struct node* createNode(value) {
    struct node* newNode = malloc(sizeof(struct node));
    newNode->item = value;
    newNode->left = NULL;
    newNode->right = NULL;

    return newNode;
}

// Insert on the left of the node
struct node* insertLeft(struct node* root, int value) {
    root->left = createNode(value);
    return root->left;
}

// Insert on the right of the node
struct node* insertRight(struct node* root, int value) {
    root->right = createNode(value);
    return root->right;
}

int main() {

```

```
struct node* root = createNode(1);
insertLeft(root, 12);
insertRight(root, 9);

insertLeft(root->left, 5);
insertRight(root->left, 6);

printf("Inorder traversal \n");
inorderTraversal(root);

printf("\nPreorder traversal \n");
preorderTraversal(root);

printf("\nPostorder traversal \n");
postorderTraversal(root);
}
```

Preorder traversal

1 ->12 ->5 ->6 ->9 ->

Postorder traversal

5 ->6 ->12 ->9 ->1 ->

...Program finished with exit code 0

Press ENTER to exit console.