

```
18.#include <stdio.h>
```

```
#include <stdlib.h>
```

```
struct Node {  
    int data;  
    struct Node* left;  
    struct Node* right;  
};
```

```
struct Node* createNode(int val) {  
    struct Node* n = (struct Node*)malloc(sizeof(struct Node));  
    n->data = val;  
    n->left = n->right = NULL;  
    return n;  
}
```

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

```
void preorder(struct Node* root) {  
    if (root == NULL) return;
```

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

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

```
int main() {  
    struct Node* root = createNode(1);  
    root->left = createNode(2);  
    root->right = createNode(3);  
    root->left->left = createNode(4);  
    root->left->right = createNode(5);  
  
    printf("Inorder: ");  
    inorder(root);  
    printf("\nPreorder: ");  
    preorder(root);  
    printf("\nPostorder: ");  
    postorder(root);  
}
```

```
printf("\n");
```

```
return 0;
```

```
}
```

Output

Clear

```
Inorder: 4 2 5 1 3
```

```
Preorder: 1 2 4 5 3 |
```

```
Postorder: 4 5 2 3 1
```

```
=== Code Execution Successful ===
```

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