

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

```
typedef struct Node {
    int data;
    struct Node *left, *right;
} node;
```

```
node *create(int data) {
    node *temp;
    temp = (node*)malloc(sizeof(node));
    temp->data = data;
    temp->left = temp->right = NULL;
    return temp;
}
```

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

```

    }
}

void insert(node *root, node *temp) {
    if(temp->data < root->data) {
        if(root->left != NULL)
            insert(root->left, temp);
        else
            root->left = temp;
    }
    if(temp->data > root->data) {
        if(root->right != NULL)
            insert(root->right, temp);
        else
            root->right = temp;
    }
}

```

```

int main(void) {
    node *root = NULL, *temp;

    int choice = 0;
    while(choice != 2)
    {
        temp =
        printf("1 - Insert\n");
        printf("2 - Exit\n");

        printf("Enter your choice:");
        scanf("%d", &choice);
        if(choice == 1)
        {
            int val;
            printf("Enter value:");
            scanf("%d", &val);
            temp = create(val);
            if(root == NULL)
                root = temp;
            //
        }
    }
}

```



```
node *root = NULL, *temp;
```

```
int choice = 0;
```

```
while(choice != 2)
```

```
{
```

```
    temp =
```

```
    printf("1 - Insert\n");
```

```
    printf("2 - Exit\n");
```

```
    printf("Enter your choice:");
```

```
    scanf("%d", &choice);
```

```
    if(choice==1)
```

```
    {
```

```
        int val;
```

```
        printf("Enter value:");
```

```
        scanf("%d", &val);
```

```
        temp = create(val);
```

```
        if(root==NULL)
```

```
            root=temp;
```

```
        else
```

```
            insert(root, temp);
```

```
    }
```

```
    else if(choice==2)
```

```
        break;
```

```
    else
```

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

```
}
```

```
printf("Inorder traversal: ");
```

```
inorder(root);
```

```
printf("\nPreorder traversal: ");
```

```
preorder(root);
```

```
printf("\nPostorder traversal: ");
```

```
postorder(root);
```

```
}
```