*Binary Search Tree.c - Code::Blocks 20.03

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<global> postorder(struct Node* root) : void

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```c
#include <stdio.h>
#include <stdlib.h>
struct Node{
    int data;
    struct Node *left,*right;
};
struct Node* createNode(int value){
    struct Node* newNode=(struct Node*)malloc(sizeof(struct Node));
    newNode->data=value;
    newNode->left=newNode->right=NULL;
    return newNode;
}
struct Node* insert(struct 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(struct Node* root){
    if(root!=NULL){
        inorder(root->left);
        printf("%d ",root->data);
        inorder(root->right);
    }
}
void preorder(struct Node* root){
    if(root!=NULL){
        printf("%d ",root->data);
        preorder(root->left);
        preorder(root->right);
    }
}
void postorder(struct Node* root){
    if(root!=NULL){
        postorder(root->left);
        postorder(root->right);
        printf("%d",root->data);
    }
}
int main(){
    struct Node* root=NULL;
    int choice,value;
    while(1){
        printf("\n---MENU---\n");
        printf("1.Insert an element into Binary Search tree.\n");
        printf("2.Inorder Traversal.\n");
        printf("3.Preorder Traversal.\n");
        printf("4.Postorder Traversal.\n");
```


C:\Users\Admin\Desktop\1BM24CS173\Binary Search Tree.c | C/C++ | Windows (CR+LF) | WINDOWS-1252 | Line 40, Col 19, Pos 1044 | Insert | Modified | Read/Write | default

Type here to search

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*Binary Search Tree.c - Code::Blocks 20.03

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<global> | postorder(struct Node* root) : void

Management

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Start here | *Binary Search Tree.c

```
    }
}
int main(){
    struct Node* root=NULL;
    int choice,value;
    while(1){
        printf("\n---MENU---\n");
        printf("1.Insert an element into Binary Search tree.\n");
        printf("2.Inorder Traversal.\n");
        printf("3.Preorder Traversal.\n");
        printf("4.Postorder Traversal.\n");
        printf("5.Display elements.\n");
        printf("6.Exit\n");
        printf("Enter your choice:");
        scanf("%d",&choice);
        switch(choice){
        case 1:
            printf("Enter value to insert:");
            scanf("%d",&value);
            root=insert(root,value);
            break;
        case 2:
            printf("Inorder Traversal:");
            inorder(root);
            printf("\n");
            break;
        case 3:
            printf("Preorder Traversal:");
            preorder(root);
            printf("\n");
            break;
        case 4:
            printf("Postorder Traversal:");
            postorder(root);
            printf("\n");
            break;
        case 5:
            printf("Elements in Binary Search Tree(Inoder Display):");
            inorder(root);
            printf("\n");
            break;
        case 6:
            printf("Exiting program...\n");
            exit(0);
        default:
            printf("Invalid choice.Try again!\n");
        }
    }
    return 0;
}
```


C:\Users\Admin\Desktop\1BM24CS173\Binary Search Tree.c | C/C++ | Windows (CR+LF) | WINDOWS-1252 | Line 40, Col 19, Pos 1044 | Insert | Modified | Read/Write | default

Type here to search

Stranger Things 5 offi...

ENG IN 11:46:50 AM 12/1/2025

"C:\Users\Admin\Desktop\1BM24CS173\Binary Search Tree.exe"

```
---MENU---
1.Insert an element into Binary Search tree.
2.Inorder Traversal.
3.Preorder Traversal.
4.Postorder Traversal.
5.Display elements.
6.Exit
Enter your choice:1
Enter value to insert:45

---MENU---
1.Insert an element into Binary Search tree.
2.Inorder Traversal.
3.Preorder Traversal.
4.Postorder Traversal.
5.Display elements.
6.Exit
Enter your choice:1
Enter value to insert:18

---MENU---
1.Insert an element into Binary Search tree.
2.Inorder Traversal.
3.Preorder Traversal.
4.Postorder Traversal.
5.Display elements.
6.Exit
Enter your choice:1
Enter value to insert:17

---MENU---
1.Insert an element into Binary Search tree.
2.Inorder Traversal.
3.Preorder Traversal.
4.Postorder Traversal.
5.Display elements.
6.Exit
Enter your choice:1
Enter value to insert:1

---MENU---
1.Insert an element into Binary Search tree.
2.Inorder Traversal.
3.Preorder Traversal.
4.Postorder Traversal.
5.Display elements.
6.Exit
Enter your choice:1
Enter value to insert:56

---MENU---
1.Insert an element into Binary Search tree.
2.Inorder Traversal.
3.Preorder Traversal.
4.Postorder Traversal.
5.Display elements.
6.Exit
Enter your choice:1
Enter value to insert:101

---MENU---
1.Insert an element into Binary Search tree.
```

"C:\Users\Admin\Desktop\1BM24CS173\Binary Search Tree.exe"

```
---MENU---
1.Insert an element into Binary Search tree.
2.Inorder Traversal.
3.Preorder Traversal.
4.Postorder Traversal.
5.Display elements.
6.Exit
Enter your choice:1
Enter value to insert:46

---MENU---
1.Insert an element into Binary Search tree.
2.Inorder Traversal.
3.Preorder Traversal.
4.Postorder Traversal.
5.Display elements.
6.Exit
Enter your choice:2
Inorder Traversal:1 17 18 45 46 56 101

---MENU---
1.Insert an element into Binary Search tree.
2.Inorder Traversal.
3.Preorder Traversal.
4.Postorder Traversal.
5.Display elements.
6.Exit
Enter your choice:3
Preorder Traversal:45 18 17 1 56 46 101

---MENU---
1.Insert an element into Binary Search tree.
2.Inorder Traversal.
3.Preorder Traversal.
4.Postorder Traversal.
5.Display elements.
6.Exit
Enter your choice:4
Postorder Traversal:1 17 18 46 101 56 45

---MENU---
1.Insert an element into Binary Search tree.
2.Inorder Traversal.
3.Preorder Traversal.
4.Postorder Traversal.
5.Display elements.
6.Exit
Enter your choice:5
Elements in Binary Search Tree(Inoder Display):1 17 18 45 46 56 101

---MENU---
1.Insert an element into Binary Search tree.
2.Inorder Traversal.
3.Preorder Traversal.
4.Postorder Traversal.
5.Display elements.
6.Exit
Enter your choice:6
Exiting program...

Process returned 0 (0x0)   execution time : 469.070 s
Press any key to continue.
```