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#include<bits/stdc++.h>
using namespace std;

struct BST
{
    int data;
    BST *left_child, *right_child;
    BST(int value)
    {
        data = value;
        left_child = NULL;
        right_child = NULL;
    }
};

BST* InsertNODE(BST* root, int
inserting_value)
{
    if (root == NULL)
        return new
BST(inserting_value);
    else if (inserting_value <
root->data)
        root->left_child =
InsertNODE(root->left_child,
inserting_value);
    else
        root->right_child =
InsertNODE(root->right_child,
inserting_value);
    return root;
}

bool Search(BST* root, int value)
{
    if (root == NULL)
        return false;
    else if (root->data == value)
        return true;
    else if (value < root->data)
        return Search(root-
>left_child, value);
    else
        return Search(root-
>right_child, value);
}

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void PrintPreorder(BST* root)
{
    if (root == NULL)
        return;
    cout << root->data << " ";
    PrintPreorder(root-
>left_child);
    PrintPreorder(root-
>right_child);
}

void PrintPostorder(BST* root)
{
    if (root == NULL)
        return;
    PrintPostorder(root-
>left_child);
    PrintPostorder(root-
>right_child);
    cout << root->data << " ";
}

int main()
{
    BST* root = NULL;
    cout << "Enter the number of
inserting values: ";
    int n;
    cin >> n;
    while (n--)
    {
        int value;
        cin >> value;
        root = InsertNODE(root,
value);
    }

    cout << "In-order traversal of
the BST: ";
    PrintInorder(root);
    cout << endl;

    cout << "Pre-order traversal
of the BST: ";
    PrintPreorder(root);
    cout << endl;
}

```

<pre> void PrintInorder(BST* root) {     if (root == NULL)         return;     PrintInorder(root-&gt;left_child);     cout &lt;&lt; root-&gt;data &lt;&lt; " ";     PrintInorder(root-&gt;right_child); }      cout &lt;&lt; searchValue &lt;&lt; " is found in the BST." &lt;&lt; endl;     else </pre>	<pre>         cout &lt;&lt; "Post-order traversal of the BST: ";         PrintPostorder(root);         cout &lt;&lt; endl;          cout &lt;&lt; "\nEnter a value to search for: ";         int searchValue;         cin &gt;&gt; searchValue;          if (Search(root, searchValue))             cout &lt;&lt; searchValue &lt;&lt; " is not found in the BST." &lt;&lt; endl;          return 0; } </pre>
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search "D:\CSE\Algorithm_Lab\A_N_S_30_383\Binary Search Tree.exe"
incl Enter the number of inserting values: 10
sing 1 5 9 3 5 7 4 6 2 8
true In-order traversal of the BST: 1 2 3 4 5 5 6 7 8 9
Pre-order traversal of the BST: 1 5 3 2 4 9 5 7 6 8
Post-order traversal of the BST: 2 4 3 6 8 7 5 9 5 1

int Enter a value to search for: 9
BS 9 is found in the BST.
BS Process returned 0 (0x0) execution time : 26.069 s
{ Press any key to continue.
}

```