

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

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

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

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

```
struct Node* insert(struct Node* root, int val) {  
    if (root == NULL) return createNode(val);  
    if (val < root->data)  
        root->left = insert(root->left, val);  
    else  
        root->right = insert(root->right, val);  
    return root;  
}
```

```
int search(struct Node* root, int key) {
```

```
if (root == NULL) return 0;

if (root->data == key) return 1;

if (key < root->data)

    return search(root->left, key);

else

    return search(root->right, key);

}
```

```
int main() {

    struct Node* root = NULL;

    root = insert(root, 10);

    insert(root, 5);

    insert(root, 20);

    insert(root, 3);

    insert(root, 7);


    int key = 7;

    if (search(root, key))

        printf("Found %d in the tree.\n", key);

    else

        printf("%d not found in the tree.\n", key);


    return 0;

}
```

Output

Found 7 in the tree.

=== Code Execution Successful ===