



# LAB 7 - (1)Qns - BST 7

1. Given N Nodes of a binary tree Create a Binary Search Tree. 2. Given a Node return value of its Parent and also the height of the parent from root. Consider root as 0.

## Input Format

First line has Number of nodes in the BST Second Line has space N integers of tree Third Line has the value of Key

## Constraints

N<100 key<100

## Output Format

prints the parent value (space) Line prints the height of the key .

## Sample Input 0

```
4
3 2 1 4
4
```

## Sample Output 0

```
3 1
```

```
#include<stdio.h>
#include<stdlib.h>
struct Node
{

};

struct Node* createNode(int data){

struct Node* insert(struct Node* root,int data){
    //insert the values in the tree and return the updated root.
}
void findParentAndHeight(struct Node* root,int target){
    //Complete the logic here.
    printf("%d %d",parent->data,height);
```

```

}

int main(){
    struct Node* root=NULL;
    int n;
    scanf("%d",&n);
    for (int i=0;i<n;i++){
        int element;
        scanf("%d",&element);
        root=insert(root,element);
    }
    int target;
    scanf("%d",&target);
    findParentAndHeight(root,target);
    return 0;
}

#include<stdio.h>
#include<stdlib.h>
struct Node
{
    //Complete the node structure.
};

struct Node* createNode(int data){
    //Complete the createNode function

struct Node* insert(struct Node* root,int data){
    //insert the values in the tree and return the updated root.
}
void findParentAndHeight(struct Node* root,int target){
    //Complete the logic here.
    printf("%d %d",parent->data,height);
    //print the values in the same format as shown above to pass the test cases.

}

int main(){
    struct Node* root=NULL;
    int n;
    scanf("%d",&n);
    for (int i=0;i<n;i++){
        int element;
        scanf("%d",&element);
        root=insert(root,element);
    }
    int target;
    scanf("%d",&target);
    findParentAndHeight(root,target);
    return 0;
}

```