

/\*insertion in binary tree as leaf node\*/

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

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

```
struct node {
```

```
int data;
```

```
struct node* right, * left;
```

```
};
```

```
struct node*tree;
```

```
void insert(struct node ** tree, int val)
```

```
{
```

```
    struct node *temp = NULL;
```

```
    if(!(*tree))
```

```
    {
```

```
        temp = (struct node *)malloc(sizeof(struct node*));
```

```
        temp->left = temp->right = NULL;
```

```
        temp->data = val;
```

```
        *tree = temp;
```

```
        return;
```

```
    }
```

```
    if(val < (*tree)->data)
```

```
    {
```

```
        insert(&(*tree)->left, val);
```

```
    }
```

```
    else if(val > (*tree)->data)
```

```
    {
```

```
        insert(&(*tree)->right, val);
```

```
    }
```

```
}
```

```

int main()
{
    node *root;
    node *tmp;
    //int l;

    root = NULL;
    /* Inserting nodes into tree */
    /*
    our tree after insertion
        9
       / \
      4  15
     / \ / \
    2  6 12 17
        */
    insert(&root, 9);
    insert(&root, 4);
    insert(&root, 15);
    insert(&root, 6);
    insert(&root, 12);
    insert(&root, 17);
    insert(&root, 2);
    printf("the node containing the value 2 is a inserted leaf node\n");

}

```

```
C:\Users\HP\OneDrive\Desktop >
the node containing the value 2 is a inserted leaf node
-----
Process exited after 0.03094 seconds with return value 0
Press any key to continue . . .
```