

22 . BST – kth min value

```
#include <stdio.h>

#include <stdlib.h>

struct Node {

    int data;

    struct Node *left, *right;

};

struct Node* newNode(int val) {

    struct Node* n = (struct Node*)malloc(sizeof(struct Node));

    n->data = val; n->left = n->right = NULL;

    return n;

}

struct Node* insert(struct Node* root, int val) {

    if (!root) return newNode(val);

    if (val < root->data) root->left = insert(root->left, val);

    else root->right = insert(root->right, val);

    return root;

}

void findKth(struct Node* root, int* k) {

    if (!root) return;

    findKth(root->left, k);

    if (--(*k) == 0) { printf("Kth min: %d\n", root->data); return; }

    findKth(root->right, k);

}

int main() {

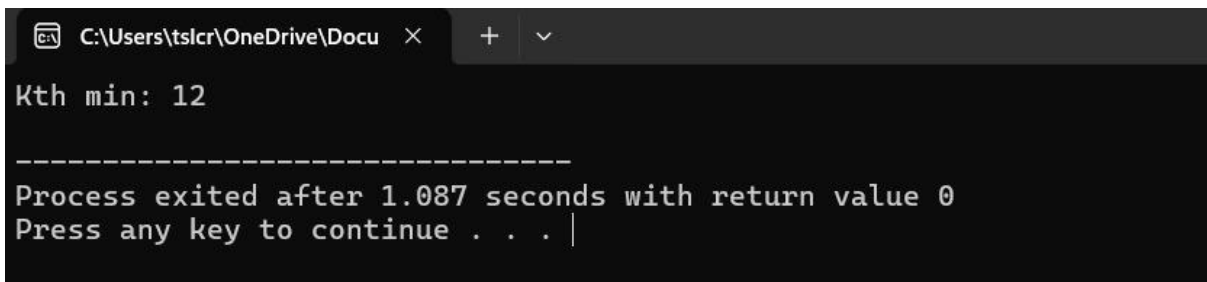
    struct Node* root = NULL;

    root = insert(root, 15);

    insert(root, 10);
```

```
insert(root, 20);  
insert(root, 8);  
insert(root, 12);  
int k = 3;  
findKth(root, &k);  
return 0;  
}
```

OUTPUT



```
C:\Users\tslcr\OneDrive\Docu  ×  +  ∨  
Kth min: 12  
-----  
Process exited after 1.087 seconds with return value 0  
Press any key to continue . . . |
```