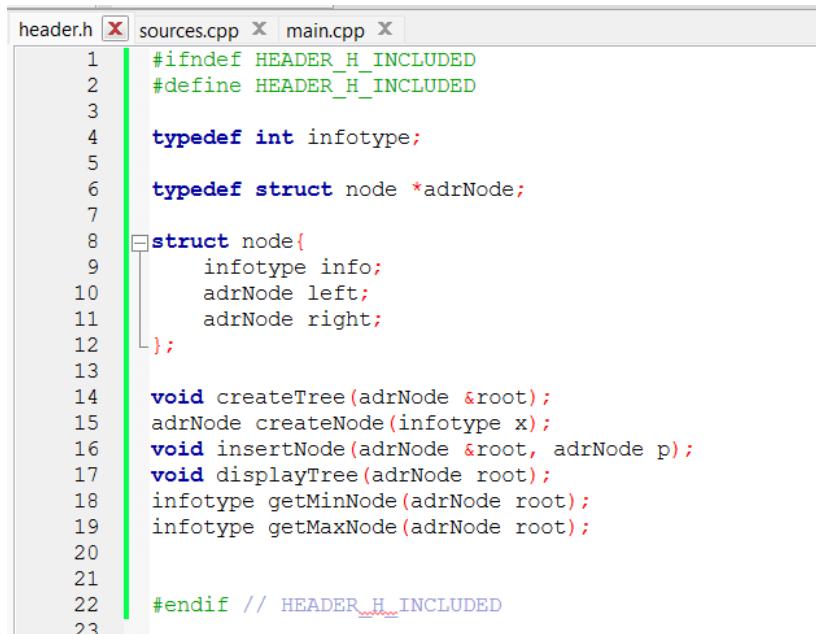


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Header



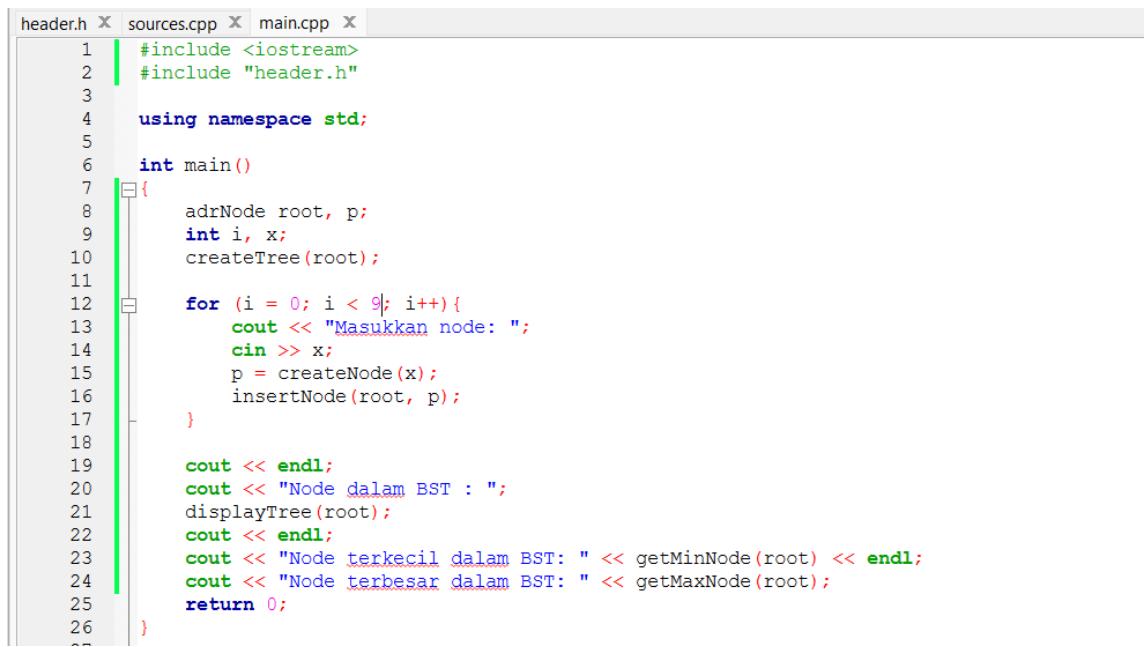
The screenshot shows a code editor window with three tabs at the top: "header.h" (selected), "sources.cpp", and "main.cpp". The "header.h" tab contains the following C++ code:

```
1 #ifndef HEADER_H_INCLUDED
2 #define HEADER_H_INCLUDED
3
4     typedef int infotype;
5
6     typedef struct node *adrNode;
7
8     struct node{
9         infotype info;
10        adrNode left;
11        adrNode right;
12    };
13
14    void createTree(adrNode &root);
15    adrNode createNode(infotype x);
16    void insertNode(adrNode &root, adrNode p);
17    void displayTree(adrNode root);
18    infotype getMinNode(adrNode root);
19    infotype getMaxNode(adrNode root);
20
21
22 #endif // HEADER_H_INCLUDED
23
```

Sources

```
header.h X sources.cpp X main.cpp X
1 #include <iostream>
2 #include "header.h"
3
4 using namespace std;
5
6 void createTree(adrNode &root) {
7     root = nullptr;
8 }
9
10 adrNode createNode(infotype x) {
11     adrNode p = new node;
12
13     p->info = x;
14     p->left = nullptr;
15     p->right = nullptr;
16
17     return p;
18 }
19
20 void insertNode(adrNode &root, adrNode p) {
21     if (root == nullptr) {
22         root = p;
23     } else if (p->info < root->info) {
24         insertNode(root->left, p);
25     } else {
26         insertNode(root->right, p);
27     }
28 }
29
30 void displayTree(adrNode root) {
31     if (root != nullptr) {
32         displayTree(root->left);
33         cout << root->info << " ";
34         displayTree(root->right);
35     }
36 }
37
38 int getMinNode(adrNode root) {
39     adrNode p = root;
40
41     while (p != nullptr && p->left != nullptr) {
42         p = p->left;
43     }
44
45     return p->info;
46 }
47
48 int getMaxNode(adrNode root) {
49     adrNode p = root;
50
51     while (p != nullptr && p->right != nullptr) {
52         p = p->right;
53     }
54
55     return p->info;
56 }
57
```

Main



The screenshot shows a code editor window with three tabs at the top: "header.h", "sources.cpp", and "main.cpp". The "main.cpp" tab is active, displaying the following C++ code:

```
1 #include <iostream>
2 #include "header.h"
3
4 using namespace std;
5
6 int main()
7 {
8     adrNode root, p;
9     int i, x;
10    createTree(root);
11
12    for (i = 0; i < 9; i++) {
13        cout << "Masukkan node: ";
14        cin >> x;
15        p = createNode(x);
16        insertNode(root, p);
17    }
18
19    cout << endl;
20    cout << "Node dalam BST : ";
21    displayTree(root);
22    cout << endl;
23    cout << "Node terkecil dalam BST: " << getMinNode(root) << endl;
24    cout << "Node terbesar dalam BST: " << getMaxNode(root);
25
26}
```

Output

```
Masukkan node: 8
Masukkan node: 6
Masukkan node: 15
Masukkan node: 4
Masukkan node: 7
Masukkan node: 12
Masukkan node: 17
Masukkan node: 9
Masukkan node: 13

Node dalam BST : 4 6 7 8 9 12 13 15 17
Node terkecil dalam BST: 4
Node terbesar dalam BST: 17
```