Thời gian còn lại 0:20:09

Câu hỏi 4

Không hoàn thành

Chấm điểm của 2,00

Given class **BinarySearchTree**, you need to finish method **find(i)** to check whether value i is in the tree or not; method **sum(l,r)** to calculate sum of all all elements v in the tree that has value greater than or equal to l and less than or equal to r.

```
#include <iostream>
#include <string>
#include <sstream>

using namespace std;

template<class T>
class BinarySearchTree
{
public:
    class Node;

private:
    Node* root;

public:
    BinarySearchTree() : root(nullptr) {}
    ~BinarySearchTree()
    {
        // You have to delete all Nodes in BinaryTree. However in this task, you can ignore it.
    }

    class Node
    {
    private:
        T value;
        Node* pLeft, * pRight;
        friend class BinarySearchTree<T>;

    public:
        Node(T value) : value(value), pLeft(NULL), pRight(NULL) {}
        ~Node() {}
    };
    Node* addRec(Node* root, T value);
    void add(T value) ;
    // STUDENT ANSWER BEGIN

    // STUDENT ANSWER END
};
```

For example:

Test	Result

BinarySearchTree<int> bst;
for (int i = 0; i < 10; ++i) {
bst.add(i);
}
cout << bst.find(7) << endl;
cout << bst.sum(0, 4) << endl
	1
	10

Answer: (penalty regime: 5, 10, 15, ... %)

Reset answer

```
1  // STUDENT ANSWER BEGIN
2  // You can define other functions here to help you.
```

```
3
4  bool find(T i) {
5      // TODO: return true if value i is in the tree; otherwise,
6
7  }
8
9  T sum(T l, T r) {
10     // TODO: return the sum of all element in the tree has val
11
12 }
13
14 // STUDENT ANSWER END
```

Precheck Kiểm tra