Office Hours

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Want to know all phone numbers a phone number has called
Quickly determine if phone number A has called phone number B
unordered_map<string, unordered_set<string>>

3 10 -2 19 7 0 1 2
^ pivot, move if >

```
 1  bool isLeftLeaning(Node* root) {
 2      // hit leaf node
 3      if (root == nullptr || (!root->left && !root->right))
 4          return false;
 5      int v;
 6      return isLeftLeaningAux(root, v);
 7  }
 8
 9  bool isLeftLeaningAux(Node* cur, int &val) {
10      if (cur == nullptr) {
11          val = 0;
12          return true;
13      }
14
15      int left, right;
16      bool lb = isLeftLeaningAux(cur->left, left);
17      bool rb = isLeftLeaningAux(cur->right, right);
18      if (!lb || !rb) return false;
19      if (left > right) {
20          val = lv + rv + cur->val;
21          return true;
22      }
23      return false;
24  }
```