

4. Convert sorted list to binary search tree (LeetCode)

```
class Solution {
public:
    TreeNode* sortedListToBST(ListNode* head) {
        if (!head) return nullptr;
        return build(head, nullptr);
    }

    TreeNode* build(ListNode* start, ListNode* end) {
        if (start == end) return nullptr;

        ListNode* slow = start;
        ListNode* fast = start;

        while (fast != end && fast->next != end) {
            slow = slow->next;
            fast = fast->next->next;
        }

        TreeNode* root = new TreeNode(slow->val);
        root->left = build(start, slow);
        root->right = build(slow->next, end);

        return root;
    }
};
```

OUTPUT:

