

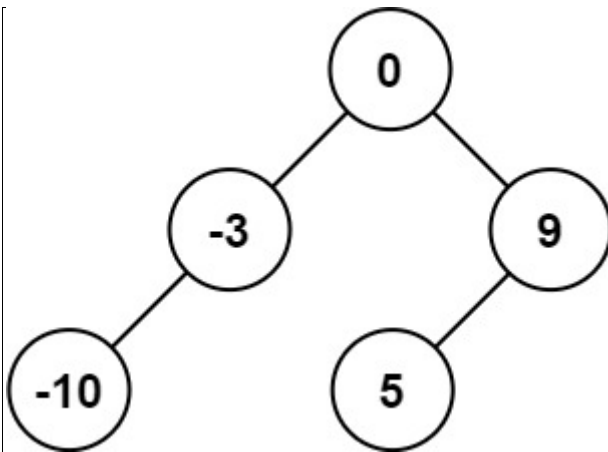
Leetcode Problem 1. (Easy)

## Convert Sorted Array to Binary Search Tree

Given an integer array `nums` where the elements are sorted in **ascending order**, convert *it to a*

*height-balanced*  
*binary search tree*.

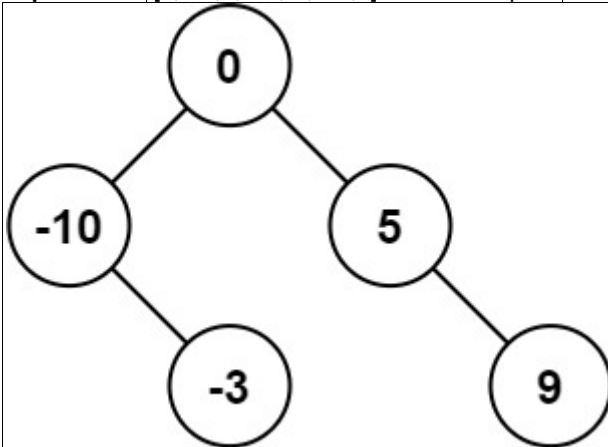
**Example 1:**



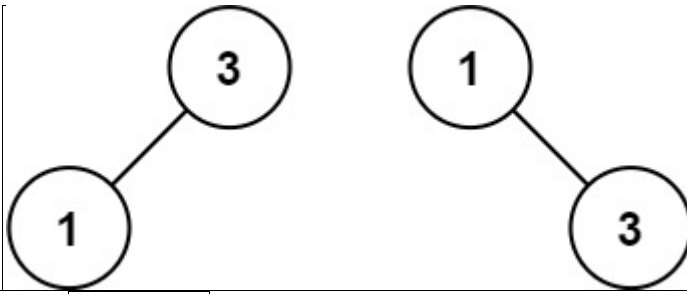
**Input:** `nums = [-10,-3,0,5,9]`

**Output:** `[0,-3,9,-10,null,5]`

**Explanation:** `[0,-10,5,null,-3,null,9]` is also accepted;



**Example 2:**



**Input:** nums = [1,3]

**Output:** [3,1]

**Explanation:** [1,null,3] and [3,1] are both height-balanced BSTs.

[]

**Constraints:**

- $1 \leq \text{nums.length} \leq 10^4$
- $-10^4 \leq \text{nums}[i] \leq 10^4$
- nums is sorted in a **strictly increasing** order.

Link: <https://leetcode.com/problems/convert-sorted-array-to-binary-search-tree/>

```
class Solution {
    public TreeNode sortedArrayToBST(int[] nums) {

        return buildTree(nums, 0, nums.length - 1);
    }

    private TreeNode buildTree(int[] nums, int left, int right) {
        if (left > right) {
            return null;
        }
        int mid = (left + right) / 2;
        TreeNode root = new TreeNode(nums[mid]);
        root.left = buildTree(nums, left, mid - 1);
        root.right = buildTree(nums, mid + 1, right);
        return root;
    }
}
```

LeetCode

<

Problem List

>

Premium

🕒

💧 0

👤

Description

Editorial

Solutions (4.5K)

Submissions

Accepted

Next question

109. Convert Sorted List to Binary Search Tree

More challenges

109. Convert Sorted List to Binary Search Tree

All statuses

All languages

Accepted

a few seconds ago

Java

Close

Sakib Rahman

Apr 24, 2023 11:57

Details

+ Solution

Java

Sorry, there are not enough accepted submissions to show data

Runtime 0 ms

Beats 100%

Memory 42.9 MB

Beats 19.33%

Click the distribution chart to view more details

Notes

Write your notes here

Related Tags

Select tags 0/5

```
/**
 * Definition for a binary tree node.
 * public class TreeNode {
 *     int val;
 *     TreeNode left;
 *     TreeNode right;
 *     TreeNode() {}
 *     TreeNode(int val) { this.val = val; }
 *     TreeNode(int val, TreeNode left, TreeNode right) {
 *         this.val = val;
 *         this.left = left;
 *         this.right = right;
 *     }
 * }
```

Console

Run

Submit