108. Convert Sorted Array to Binary Search Tree

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- Difficulty: Easy
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Given an array where elements are sorted in ascending order, convert it to a height balanced BST.

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```
/**
 * Definition for a binary tree node.
 * struct TreeNode {
 *     int val;
 *     TreeNode *left;
 *     TreeNode *right;
 *     TreeNode(int x) : val(x), left(NULL), right(NULL) {}
 * };
 */
class Solution {
public:
    TreeNode* sortedArrayToBST(vector<int>& nums) {
        if(nums.size()==0) return NULL;
        if(nums.size()==1) return new TreeNode(nums[0]);
        int middle = nums.size()/2;
        TreeNode *root = new TreeNode(nums[middle]);

        vector<int> leftarr =
vector<int>(nums.begin(),nums.begin()+middle);
        vector<int> rightarr =
vector<int>(nums.begin()+middle+1,nums.end());
        root->left = sortedArrayToBST(leftarr);
        root->right = sortedArrayToBST(rightarr);
```

```
        return root;
    }
};
```