

/*Given an array where elements are sorted in ascending order, convert it to a height balanced BST.

For this problem, a height-balanced binary tree is defined as a binary tree in which the depth of the two subtrees of every node never differ by more than 1.

Example:

Given the sorted array: [-10,-3,0,5,9],

One possible answer is: [0,-3,9,-10,null,5], which represents the following height balanced BST:

0 /\ -3 9 // 10 5*/

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- 思想：
- (1) 分治法，利用递归，将数组中间的值作为新的根节点，再分别调用递归函数处理左半部分和右半部分

```
public TreeNode sortedArrayToBST(int[] nums) {  
  
    if (nums == null || nums.length < 1)  
        return null;  
  
    int numsLength = nums.length;  
  
    return sortedArrayToBSTHelper(nums, 0, numsLength - 1);  
}  
  
private TreeNode sortedArrayToBSTHelper(int[] nums, int startIndex, int endIndex) {  
    if (startIndex > endIndex) {  
        return null;  
    }  
  
    int mid = (startIndex + endIndex) / 2;  
    TreeNode root = new TreeNode(nums[mid]);  
  
    root.left = sortedArrayToBSTHelper(nums, startIndex, mid - 1);  
    root.right = sortedArrayToBSTHelper(nums, mid + 1, endIndex);  
  
    return root;  
}
```