108. Convert Sorted Array to Binary Search Tree

题目描述：https://leetcode.com/problems/convert-sorted-array-to-binary-search-tree/

> 把排序数组转换成二叉排序树

解题思路：

递归

代码：

```
/**
 * 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;
        int mid = nums.size()/2;
        TreeNode* root = new TreeNode(nums[mid]);
        vector<int> l(mid);
        vector<int> r(nums.size() - mid - 1);
        for(int i = 0; i < mid; i++) {
            l[i] = nums[i];
        }
        for(int i = 0; i < nums.size() - mid - 1; i++) {
            r[i] = nums[i+mid+1];
        }
        root->left = sortedArrayToBST(l);
        root->right = sortedArrayToBST(r);
        return root;
    }
};
```