23. Merge k Sorted Lists

题目描述：https://leetcode.com/problems/merge-k-sorted-lists/

> 把k个链表merge

解题思路：

两个两个的merge

代码：

```
/**
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     ListNode *next;
 *     ListNode(int x) : val(x), next(NULL) {}
 * };
 */
class Solution {
public:
    ListNode* mergeTwoLists(ListNode* l1, ListNode* l2) {
        if(l1 == nullptr) return l2;
        if(l2 == nullptr) return l1;
        if(l1->val < l2->val) {
            l1->next = mergeTwoLists(l1->next, l2);
            return l1;
        }
        else {
            l2->next = mergeTwoLists(l1, l2->next);
            return l2;
        }
    }
    ListNode* mergeKLists(vector<ListNode*>& lists) {
        if(lists.size() == 0) return nullptr;
        while(lists.size() > 1) {
            lists.push_back(mergeTwoLists(lists[0], lists[1]));
            lists.erase(lists.begin());
            lists.erase(lists.begin());
        }
        return lists[0];
    }
};
```