

56、Merge Intervals

Given a collection of intervals, merge all overlapping intervals.

For example, Given `[1,3],[2,6],[8,10],[15,18]`, return `[1,6],[8,10],[15,18]`.

【思路】

排序之后合并

```
/**
 * Definition for an interval.
 * struct Interval {
 *     int start;
 *     int end;
 *     Interval() : start(0), end(0) {}
 *     Interval(int s, int e) : start(s), end(e) {}
 * };
 */
class Solution {
public:
    vector<Interval> merge(vector<Interval>& intervals) {
        vector<Interval> res;
        if(intervals.empty()) return intervals;
        sort(intervals.begin(), intervals.end(), [](Interval a, Interval b){return a.start <
b.start;
        });
        Interval inter = intervals[0];
        for(int i=1;i<intervals.size();i++){
            if(inter.end >= intervals[i].start){
                inter = Interval(inter.start, max(intervals[i].end, inter.end));
            }
            else{
                res.push_back(inter);
                inter = intervals[i];
            }
        }
        res.push_back(inter);
        return res;
    }
};
```