

## 18. 4Sum

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题目描述: <https://leetcode.com/problems/4sum/>

给定一个candidate数组，作为候选，给定一个target，求4个加和等于target的不重复组合

解题思路:

两层for循环+2Sum

代码:

```

class Solution {
public:
    vector<vector<int>> fourSum(vector<int>& n, int target) {
        vector<vector<int> > res;
        sort(n.begin(), n.end());
        for(int i = 0; i < n.size(); i++){
            if(i > 0 && n[i] == n[i-1])
                continue;
            int t1 = target - n[i];
            for(int j = i + 1; j < n.size(); j++){
                int t2 = t1 - n[j];
                if(j > i+1 && n[j] == n[j-1])
                    continue;
                int k = j + 1, l = n.size() - 1;
                while(k < l){
                    if(n[k] + n[l] > t2)
                        l--;
                    else if(n[k] + n[l] < t2)
                        k++;
                    else{
                        res.push_back({n[i], n[j], n[k], n[l]});
                        while(k < n.size() - 1 && n[k] == n[k + 1]) k++;
                        while(l > k && n[l] == n[l - 1]) l--;
                        k++;l--;
                    }
                }
            }
        }
        return res;
    }
};

```