

## 15. 3Sum

题目描述: <https://leetcode.com/problems/3sum/>

给定一个整数数组，求里面3个数相加等于0的所有不重复组合

解题思路:

1层for循环 + Two Sum

代码:

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

