

324. Wiggle Sort II

题目描述: <https://leetcode.com/problems/wiggle-sort-ii/>

给定一个数组，要求按照 $\text{nums}[0] \leq \text{nums}[2] \leq \text{nums}[4] \dots$ 排列。

例如:

- (1) Given $\text{nums} = [1, 5, 1, 1, 6, 4]$, one possible answer is $[1, 4, 1, 5, 1, 6]$.
- (2) Given $\text{nums} = [1, 3, 2, 2, 3, 1]$, one possible answer is $[2, 3, 1, 3, 1, 2]$.

解题思路:

按照如下方式插入: 例如 0, 1, 2, 3, 4, 5, 6, 7, 8, 9

4, 3, 2, 1, 0

-- 9, 8, 7, 6, 5

4, 9, 3, 8, 2, 7, 1, 6, 0, 5

最终结果为: 4, 9, 3, 8, 2, 7, 1, 6, 0, 5

代码:

```
class Solution {
public:
    void wiggleSort(vector<int>& nums) {
        sort(nums.begin(), nums.end());
        vector<int> sorted = nums;
        for(int i = nums.size() - 1, j = 0, k = i/2+1; i >= 0; i--) {
            if(i % 2 == 1) {
                nums[i] = sorted[k++];
            }
            else {
                nums[i] = sorted[j++];
            }
        }
        return ;
    }
}
```