53、Maximum Subarray

Find the contiguous subarray within an array (containing at least one number) which has the largest sum.

For example, given the array `[-2,1,-3,4,-1,2,1,-5,4]`, the contiguous subarray `[4,-1,2,1]` has the largest sum = `6`.

【思路】

动态规划

```cpp
class Solution {
public:
    int maxSubArray(vector<int>& nums) {
        int* dp = new int[nums.size()];
        dp[0] = nums[0];
        int MAX = dp[0];
        for(int i=1;i<nums.size();i++){
            dp[i] = nums[i] + (dp[i-1]>0? dp[i-1]:0);
            MAX = dp[i] > MAX? dp[i]: MAX;
        }
        return MAX;
    }
};
```