1. Maximum Subarray

Easy

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Given an integer array nums, find the contiguous subarray (containing at least one number) which has the largest sum and return its sum.

**Example:**

Input: [-2,1,-3,4,-1,2,1,-5,4],  
Output: 6  
Explanation: [4,-1,2,1] has the largest sum = 6.

**Follow up:**

If you have figured out the O(*n*) solution, try coding another solution using the divide and conquer approach, which is more subtle.

**解**

动态规划

class Solution {  
public:  
 int maxSubArray(vector<int>& nums) {  
 vector<int>dp(nums.size() + 1);  
 dp[0] = 0;  
 dp[1] = nums[0];  
 int ans = dp[1];  
 for(int i = 2; i < dp.size(); ++i){  
 dp[i] = max(dp[i - 1] + nums[i - 1], nums[i - 1]);  
 ans = max(ans, dp[i]);  
 }  
 return ans;  
 }  
};