```cpp
int maxSubArray(vector<int> nums){
    vector<int> Ms(nums.size());
    Ms[0] = nums[0];

    for (int i = 1; i < Ms.size(); i++)
        Ms[i] = max(nums[i], Ms[i - 1] + nums[i]);

    return *max_element(Ms.begin(), Ms.end());

}
int maxProfit(vector<int>& prices) {
    vector<int> Ds(prices.size());
    Ds[0] = 0;
    for (int i = 1; i < prices.size(); i++)
        Ds[i] = prices[i] - prices[i - 1];

    return maxSubArray(Ds);
}
```