#include <iostream>

#include <vector>

using namespace std;

int maxSubArray(vector<int>& nums) {

vector<int> dp(nums.size());

dp[0] = nums[0];

int res = dp[0];

for (int i = 1; i < nums.size(); i++) {

dp[i] = max(dp[i-1]+nums[i], nums[i]);

res = max(res, dp[i]);

}

return res;

}

int main() {

vector<int> a{-20,11,-4,13,-5,-2};

cout << maxSubArray(a) << endl;

return 0;

}