**Kadane's Algorithm**

<https://practice.geeksforgeeks.org/problems/kadanes-algorithm-1587115620/1>

**Medium**Accuracy: 51.0% Submissions: 49471 Points: 4

Given an array **arr**of **N** integers. Find the contiguous sub-array with maximum sum.

**Example 1:**

**Input:**

N = 5

arr[] = {1,2,3,-2,5}

**Output:**

9

**Explanation:**

Max subarray sum is 9

of elements (1, 2, 3, -2, 5) which

is a contiguous subarray.

**Example 2:**

**Input:**

N = 4

arr[] = {-1,-2,-3,-4}

**Output:**

-1

**Explanation:**

Max subarray sum is -1

of element (-1)

**Your Task:**  
You don't need to read input or print anything. The task is to complete the function **maxSubarraySum**() which takes arr and N as input parameters and returns the sum of subarray with maximum sum.

**Expected Time Complexity:**O(N)  
**Expected Auxiliary Space:**O(1)

**Constraints:**  
1 ≤ N ≤ 106  
-107 ≤ A[i] <= 107