

Maximum subarray

Problem Description

Given an array $A[1..n]$ of n integers, find a consecutive sub-array, including empty sub-array, with maximized sum. $n \leq 60000$.

Input Format

The first line has an integer which indicates the number of test cases. The first line of each test case is an integer n , $1 < n \leq 60000$, which is the number of integers in the array. The next line contains n integers in the array, which are $A[1]$, $A[2]$, ..., $A[n]$. Each $A[i]$ is between -1000 and 1000.

Output Format

For each case, output the maximal sum of any consecutive subarray, including empty subarray, in one line.

Example

Sample Input:	Sample Output:
2	0
3	8
-3 -5 -1	
10	
-5 3 -2 4 -1 -3 7 -3 -2 4	