**Max Sum Subarray of size K**

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Given an array of integers and a number K. Write a program to find the maximum sum of a subarray of size K.  
  
**Input:**  
First line of input contains a single integer T which denotes the number of test cases. Then T test cases follows. First line of each test case contains two space separated integers N and K where N denotes the number of elements. Second line of each test case contains N space separated integers which denotes the elements of the array.  
**Output:**  
For each test case print the maximum sum of a subarray of size K.  
  
**Constraints:**  
1<=T<=100  
1<=N<=105  
1<=K<=N  
  
**Example:**  
**Input:**  
2  
4 2  
100 200 300 400  
9 4  
1 4 2 10 23 3 1 0 20  
**Output:**  
700  
39

\*\*For More Examples Use Expected Output\*\*

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<http://practice.geeksforgeeks.org/problems/max-sum-subarray-of-size-k/0>

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package javaapplication250;

import java.io.\*;

import java.math.\*;

import java.util.\*;

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\*

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public class JavaApplication250 {

public static void main(String[] args) throws IOException {

// TODO code application logic here

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

int t = Integer.parseInt(br.readLine());

while(t-- > 0) {

String[] nk = br.readLine().trim().split(" ");

int n = Integer.parseInt(nk[0]);

int k = Integer.parseInt(nk[1]);

String[] input = br.readLine().trim().split(" ");

int[] arr = new int[n];

for(int i =0; i<n; i++) {

arr[i] = Integer.parseInt(input[i]);

}

int sum =0;

for(int i =0; i<k; i++) {

sum += arr[i];

}

int max\_sum = sum;

for(int i =1; i<n-k+1; i++) {

sum -= arr[i-1];

sum += arr[i+k-1];

max\_sum = Math.max(max\_sum, sum);

}

System.out.println(max\_sum);

}

}

}