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Largest Sum Subarray of Size at least K

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Given an array and a number k, find the largest sum of the subarray containing at least k numbers. It may be assumed that the size of array is at-least k.

Input:

The first line of input contains an integer T denoting the number of test cases. Then T test cases follow. Each test case contains an integer n denoting the size of the array. Then the following line contains n space separated integers. The last line of the input contains the number k.

Output:

Print the value of the largest sum of the subarray containing at least k numbers.

Constraints:

1<=T<=10^5

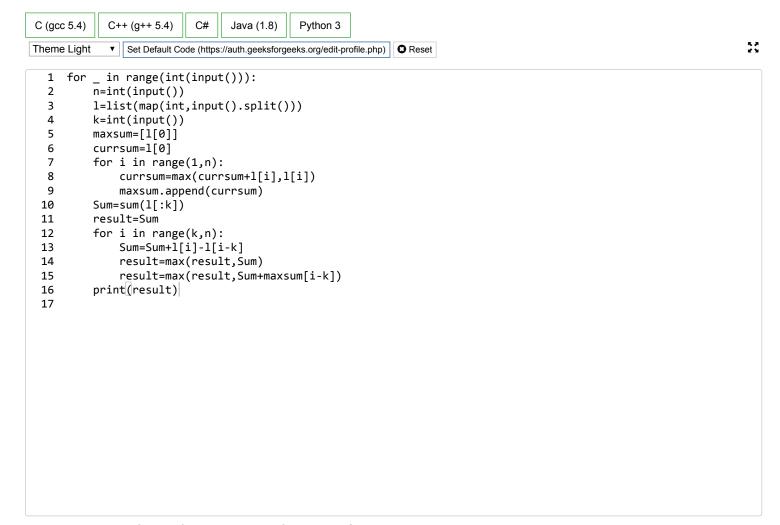
1<=n<=10^5

1<=a[i]<=10^5

1<=k<=n

Example: Input: 2 4 -4 -2 1 -3 2 6 111111 2 Output: -1 6 ** For More Input/Output Examples Use 'Expected Output' option ** Contributor: Ayush Govil Author: Ayush Govil 1 (https://auth.geeksforgeeks.org/user/Ayush Govil 1/practice/) (/problem_submissions.php?pid=1992) (/problem_submissions.php? All submissions My submissions pid=1992&isSolved=ALL&lang=ALL&user=Self) Editorial (/editorial.php?pid=1992)

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Compile & Test

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Expected Output

Compilation/Execution Result:

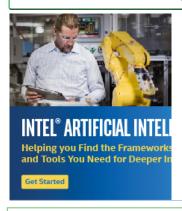
Correct Answer.

Execution Time:0.02

Next Suggested Problem: Print leaf nodes from preorder traversal of BST (/problems/print-leaf-nodes-from preorder traversal of BST (/problems/print-leaf-nodes

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Mike R • 7 months ago

10

57-93-421-8910

5

Why is the expected output 26? It seems like it should be 16 $\,$

2 ^ | V • Reply • Share >



rishabh sethia → Mike R • 7 months ago

@Mike R,

The output expected is 26 as 2 1 -8 9 10 5 7 . depicts the cyclic testcase, so it must also be considered! 1 \land | \lor \bullet Reply \bullet Share \gt

DG

DG

DG

```
Nikhil Cheke → rishabh sethia • 6 months ago
            please help..
            for following case
            -12-34
            I am getting answer 5 (4 -1 2)..
            but at the time of submission it is showing correct ans is 3 ..
            how ??
            Jasmeet Chhabra → Nikhil Cheke • 6 months ago
                  correct answer should be 5
                  ∧ | ∨ • Reply • Share ›
                   Jasmeet Chhabra → Nikhil Cheke • 6 months ago
                  same problem
                  Yash Garg → Mike R • 7 months ago
      Yes, I have the same error
      1 ^ \ Reply • Share
           sandy * Yash Garg • 7 months ago
      DG
            same error
            Vidit Kumar → Mike R • 2 months ago
      My code got accepted without considering cyclic case. The output to the above input is 16 according to them.
      Reply • Share >
Deepak Gupta • 2 months ago
http://hackerranksolutionc....
Ashish Katiyar • 5 months ago
Constraints:
1<=T<=10^5
1<=n<=10^5
1<=a[i]<=10^5
1<=k<=n
Constraint for a[i] are wrong for sure, please update it.
Vivek Mathur • 6 months ago
Please write correct constraints problem setters :/
deepanshu maheshwari → Vivek Mathur • 5 months ago
DG
      yes, the constraints are sense less
      Rahul Singh • 6 months ago
http://ide.geeksforgeeks.or...
simple solution using DP;
```

```
Rahul Singh • 6 months ago
<del>DG</del>
        Guys Now NO more Cyclic test cases
        ∧ V • Reply • Share >
       Nikhil Cheke • 6 months ago
       please help..
       if im considering cyclic case then it is showing wrong answer for non-cyclic case(not considering cycle) and vice versa..
        please help..
        Ayush Govil Mod • 6 months ago
<del>DG</del>
        @Mike R:disqus @Yash Garg:disqus @jish @Aryaman Gupta
        Thanks for responding the bug!!
        It is corrected now.
        Feel free to comment for any query.
        Happy Coding!!
        ☐ Jasmeet Chhabra → Ayush Govil • 6 months ago
              @Ayush Govil
              perfectly working code
              ur test case is hopefully wrong (-1 2-3 4) k= 3; gives output 3 but should be 5 cyclic case (4-1 2)
              http://ide.geeksforgeeks.or...
              Jasmeet Chhabra → Ayush Govil • 6 months ago
        <del>DG</del>
              please consider this case
              Input:
              4
              -12-34
              3
              Its Correct output is:
              3
              And Your Output is:
              5
              it should be 5 only. consider cyclic case (4,-1,2)
              Neha Waghmare → Jasmeet Chhabra • 5 months ago
               <del>DG</del>
                     same problem
                     Atulit Kumar • 7 months ago
<del>DG</del>
       please update the problem statement regarding the number of test cases
        ∧ V • Reply • Share >
        Sameer Nayyar • 7 months ago
DG
       what should be the ans in case of
       4 -2 1 5
       its giving 10 but i m not getting how?
        ∧ V • Reply • Share >
```

```
Debarka Mukhopadhyay → Sameer Nayyar • 7 months ago
             add all the +ve numbers
             jish • 7 months ago
<del>DG</del>
       Expected output seems to be wrong for the below case:
       57-93-421-8910
       5
       Expected:26. Correct: 16
       Consider the below case:
       111-11111
       4
       Expected: 7. Correct: 6
       Seems like the code for computing maximum sum till(including) ith element is not enforcing the inclusion of the element at
       index i.
       Aryaman Gupta → jish • 7 months ago
       ÐG
             Same problem I am getting.
             Sameer Nayyar → jish • 7 months ago
             how correct is 6
             jish → Sameer Nayyar • 7 months ago
                   6 is the largest sum which can be formed from any number(>=k) of contiguous elements in the array (which
                   includes the whole array in this case).
                   Debarka Mukhopadhyay → jish • 7 months ago
                   DG
                         doesn't have to be contiguous. see expected output for
                         1
                         5
                         4 1 -27 1 4
                         output: 10
                         if we had to take contiguous values it would have been 5
                         Abhishek Kushwah → Debarka Mukhopadhyay • 7 months ago
                         how can be expected output is possible for test case?
                         input:
                         1
                         8
                         -521 421 -843 450 -798 321 -120 53
                         expected output:-94
                         but according to me largest sum of contiguous subarray is -10
                         Abhishek Kushwah → Abhishek Kushwah • 7 months ago
                   <del>DG</del>
                         okay its correct answer is -94
```