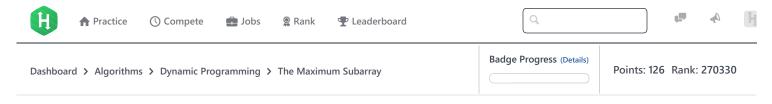
16/11/2017 HackerRank



The Maximum Subarray



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Given an array $A = [a_0, a_1, a_2, \ldots, a_{N-1}]$ of N elements, find the maximum possible sum among

- 1. all nonempty subarrays.
- 2. all nonempty subsequences.

We define a subarray as a contiguous subsequence. Note that empty subarrays/subsequences should not be considered.

Input Format

The first line of input contains a single integer T denoting the number of test cases.

The first line of each test case contains a single integer N. The second line contains N space-separated integers $a_0, a_1, \ldots, a_{N-1}$ denoting the elements of A.

Constraints

- $1 \le T \le 10$
- $1 \le N \le 10^5$
- $-10^4 \le a_i \le 10^4$

The subarray and subsequences you consider should have at least one element.

Output Format

Print two space-separated integers denoting the maximum sums of nonempty subarrays and nonempty subsequences, respectively.

Sample Input 0

```
2
4
1 2 3 4
6
2 -1 2 3 4 -5
```

Sample Output 0

10 10 10 11

Explanation 0

In the first case: The maximum sum for both types of subsequences is just the sum of all the elements since they are all positive.

In the second case: The subarray [2, -1, 2, 3, 4] is the subarray with the maximum sum, and [2, 2, 3, 4] is the subsequence with the maximum sum.

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f ⊮ in
                                                                                            Submissions: 50658
                                                                                            Max Score:50
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                                                                                                Dynamic Programming Basics
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 Current Buffer (saved locally, editable) & 🗘
                                                                                           Java 7
 1 ▼ import java.io.*;
 2 import java.util.*;
   import java.text.*;
   import java.math.*;
   import java.util.regex.*;
 7 ▼ public class Solution {
        public static void main(String args[] ) throws Exception {
 8 ▼
 9 ▼
             \slash Enter your code here. Read input from STDIN. Print output to STDOUT \slash
10
11
12
                                                                                                                    Line: 1 Col: 1
1 Upload Code as File
                      Test against custom input
                                                                                                        Run Code
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```

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