Max Sum

https://vjudge.net/problem/hdu-1003

Given a sequence a[1],a[2],a[3]……a[n], your job is to calculate the max sum of a sub-sequence. For example, given (6,-1,5,4,-7), the max sum in this sequence is 6 + (-1) + 5 + 4 = 14.

Input

The first line of the input contains an integer T(1<=T<=20) which means the number of test cases. Then T lines follow, each line starts with a number N(1<=N<=100000), then N integers followed(all the integers are between -1000 and 1000).

Output

For each test case, you should output two lines. The first line is "Case #:", # means the number of the test case. The second line contains three integers, the Max Sum in the sequence, the start position of the sub-sequence, the end position of the sub-sequence. If there are more than one result, output the first one. Output a blank line between two cases.

Sample

Input	Output
2 5 6 -1 5 4 -7 7 0 6 -1 1 -6 7 -5	Case 1: 14 1 4 Case 2: 7 1 6