

E - Maximum Contiguous Sum

I live my life in ever-widening circles that extend all over the world.
Rainer Maria Rilke

Context

Life: the circle. The mind: the square. The soul: the polygon. Wisdom: the Great Face of Life.

The Problem

There are n numbers (some possibly negative) in a circle, and we want to find the maximum contiguous sum along an arc of the circle.

The Input

The first line of the input contains an integer, t , indicating the number of test cases.

For each test case, there is a line with one number, n , indicating the size of the circle, where $1 \leq n \leq 10000$. We assume that the first number corresponds to the first position, the second to the second position, and so on.

Then, there is a new line with the n integer numbers that make up the circle.

The Output

For each test case, the output should consist of one line showing three numbers: the maximum contiguous sum along an arc of the circle, the position in which the solution begins and the size of the arc. If there is more than one maximum solution, you have to output the solution that starts in the smallest position; and if there is a tie in the smallest position, you have to write the solution with the smallest size of the arc.

Sample Input

```
4
1
245
2
-24 256
4
45 -23 56 -600
4
56 -600 45 -23
```

Sample Output

```
245 1 1
256 2 1
78 1 3
78 3 3
```