

# Problem B: Bound Found

You are given a sequence of  $n$  integers and a non-negative target  $t$ . You are to find a non-empty range of the sequence (i.e. a continuous subsequence) and output its lower index  $l$  and its upper index  $u$ . The absolute value of the sum of the values of the sequence from the  $l$ -th to the  $u$ -th element (inclusive) must be at least as close to  $t$  as the absolute value of the sum of any other non-empty range.

## Input Specification

The input file contains several test cases. Each test case starts with two numbers  $n$  and  $k$ . Input is terminated by  $n = k = 0$ . Otherwise,  $1 \leq n \leq 100000$  and there follow  $n$  integers with absolute values  $\leq 10000$  which constitute the sequence. Then follow  $k$  queries for this sequence. Each query is a target  $t$  with  $0 \leq t \leq 1000000000$ . The sum of all  $k$  in the input file is  $\leq 1000$ .

## Output Specification

For each query output 3 numbers on a line: some closest absolute sum and the lower and upper indices of some range where this absolute sum is achieved. Possible indices start with 1 and go up to  $n$ .

## Sample Input

```
5 1
-10 -5 0 5 10
3
10 2
-9 8 -7 6 -5 4 -3 2 -1 0
5 11
15 2
-1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1
15 100
0 0
```

## Sample Output

```
5 4 4
5 2 8
9 1 1
15 1 15
15 1 15
```