

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 ≤ 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 ≤ 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
```