Search The Index

Given N positive integers and an integer X. For each query, you have to find index L and R where a[L]+a[L+1]+...+a[R] = X. Note that we will use zero-based array (the index of the array starts from 0).

Format Input
the first line is an integer N and Q. The next line contains N positive integers A_i. The next Q lines contain an integer X represents the query.

Format Output
For each test case, output "Case #T : L R", where T is the test case number, L and R are the indexes of the first occurence (the first one that found with the smallest L). If there is no solution, output "Case #T : -1", where T is the test case number.

Constraints
1 <= N <= 1 000
1 <= Q <= 1 000
1 <= A_i <= 1 000
1 <= X <= 1 000 000

Sample Input (standard input)	Sample Output (standard output)
5 4 1 1 3 4 5 14 1 4 20	Case #1: 0 4 Case #2: 0 0 Case #3: 1 2 Case #4: -1

Explanation
These are all possible sums of the array

L index	R index	Sum
0	0	1
0	1	2
0	2	5
0	3	9
0	4	14

L index	R index	Sum
1	1	1
1	2	4
1	3	8
1	4	13
2	2	3

L index	R index	Sum
2	3	7
2	4	12
3	3	4
3	4	9
4	4	5

For the first case, there are two solutions (L=1, R=1) and (L=0, R=0), so output 0 0.