Attractive Subsequence

You receive a sequence S of non-negative integers numbers. Your task is calculate the total of Attractive Subsequences. An Attractive Subsequences is a subsequence of consecutive elements in S that the sum of the elements in it is equal to the value K. For example, consider the sequence $S = \langle 0,\ 0,\ 25,\ 0,\ 0,\ 25 \rangle$ and the value $K = 25$, there are 12 Attractive Subsequences, these are represented with ordered pairs $(ind_1,\ ind_2)$, ind_1 is the position of the first element and ind_2 is the position of the last element in the original sequence S. In this representation the Attractive Subsequences are: $(1,\ 3)$, $(1,\ 4)$, $(1,\ 5)$, $(2,\ 3)$, $(2,\ 4)$, $(2,\ 5)$, $(3,\ 3)$, $(3,\ 4)$, $(3,\ 5)$, $(4,\ 6)$, $(5,\ 6)$ and $(6,\ 6)$.

Input Format

The input contains three lines, the first line contains two positive integers N ($1 \leq N \leq 10^5$) and Q ($1 \leq Q \leq 10^2$), the number of elements in the sequence S and the number of queries respectively. The next line contains N non-negative integers S_i ($0 \leq S_i \leq 10^3$). The next line contains Q positive integers numbers K_j ($1 \leq K_j \leq 10^7$), for the queries of the attractive subsequences.

Constraints

$1 \leq N \leq 10^5$
$1 \leq Q \leq 10^2$
$0 \leq S_i \leq 10^3$
$1 \leq K_j \leq 10^7$

Output Format

For case you must print Q space-separated integers numbers in a single line, one per query, with the total of the attractive subsequences.

Sample Input 0

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6 2
0 0 25 0 0 25
25 50
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Sample Output 0

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12 3
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Sample Input 1

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7 3
1 6 5 2 3 4 7
7 5 11
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Sample Output 1

```
4 2 2
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