Any Special Searching?

HackerRank

You are given an array A of size N and Q queries. For each query, you are given a target sum S. Your task is to find the minimum index i (1-based indexing) such that the sum of the elements from the first index to i (i.e., A[1] + A[2] + ... + A[i]) is greater than or equal to S. If no such index exists, return -1.

Note: Don’t forget to use fast I/o code in main function. ios_base::sync_with_stdio(false); cin.tie(NULL); Use this two line at the beginning of the main function. Use ‘\n’ instead of endl;

Input Format

The first line contains an integer N , the size of the array. The second line contains N space-separated integers representing the elements of the array A. The third line contains an integer Q, the number of queries. The next Q lines each contain a single integer S, representing the target sum for that query.

Constraints

- (0 < N ≤ 100,000),
- (0 ≤ A[i] ≤ 1,000,000,000),
- (1 ≤ Q ≤ 120,000),
- (0 ≤ S ≤ 10^18)

Output Format

For each query, output a single integer representing the minimum index i such that the prefix sum from the first element to i is greater than or equal to S. If no such index exists, output -1.

Sample Input 0

```
5
1 2 3 4 5
3
6
9
14
```

Sample Output 0

```
3
4
5
```

Sample Input 1

```
4
1 1 1 1
2
```

```
10
5
```

Sample Output 1

```
-1
-1
```