

# Vision Field

## Description

There are  $N$  buildings stand along the horizon line. Each building are been represented as a vertical segment with two end points at  $(i, 0)$  and  $(i, A_i)$ . There are  $M$  queries in total. For each query, we wonder know how many buildings you can see if you stand at  $(0, h)$ .

..  $N, M \leq 10^6$ , both  $A_i$  &&  $h$  is positive interger and  $\leq 10^9$  .. .

## Input

$n$   
 $A_1 A_2 \dots A_n$   
 $m$  ... (here following the  $m$  query.)

## Output

... (for each query, simply print how many buildings you can see. )

## Example

**Input:**

5  
2 3 3 3 4  
3  
3  
2  
4

**Output:**

3  
2  
5