**Queries in an Array**

Chef has an array **A** consisting of positive integers. This array is **sorted** in non-decreasing order from left to right.

You are given Q queries. Each query consists of three integers l, r, x. Answer of this query can be found as follows. Consider the sub array al, al+1… ar. The answer to the query is the count of numbers in this sub array that are greater or equal to x.

**Input**

* The first line of each test case contains two space-separated integers n, Q.
* The second line contains n space separated integers denoting the array **A**.
* Each of the next Q lines contains three space-separated integers l, r, x denoting the query.

**Output**

Output Q lines one for each query containing the answer for the corresponding the query.

**Constraints**

* 1 ≤ n,Q ≤ 10^5
* 1 ≤ ai ≤ 10^9
* 1≤ l ≤ r ≤n
* 1 ≤x ≤ 10^9

**Sample Input**

5 6

1 2 3 6 9

1 5 1

1 5 3

1 5 10

1 4 4

2 5 4

2 5 1

**Sample Output**

5

3

0

1

2

4

**Explanation**

* For the first query, all the elements of the array are ≥1. Thus, the answer is 5.
* For the second query, the answer will be 3, as the elements 3, 6, 9 are ≥3.