The bored tourist

Assignment 2
Computer Programming
Due date: TBA

Problem Statement: Tourist always comes first in whatever contest he takes part in. He got so bored by that , he decided to come up with his own programming contests which could be challenging for him also. He gathered N programmers and decided to take part in Q contests. For each contest, he gathers some programmers and decided to make teams of 2 programmers whose sum of rating is equal to his rating for that contest. A progammer can be in multiple teams. Each match between tourist and pair of programmers is called as a showdown. As tourist is busy , help him to find him how many showdowns he will have in each of the contests. Once a showdown in over tourist will take on a different pair.

Input
First line: N - number of elements and Q - number of contests.
Second line contains N integers denoting the rating of programmers.
Next Q lines consists of three integers - l , r and x. Tourist includes programmers from index l to r in the contest and has rating x for that contest only.(He can have different ratings for different contests)
Note : There won't be more than 10^3 programmers with the same rating. .

Output
Q lines where each line contains the total number of showdowns tourist can have in that contest.

Constraints
$1 \leq N \leq 10^6$
$1 \leq Q \leq 10^4$
$1 \leq$ Rating of each programmer $\leq 10^3$
$1 \leq l \leq r \leq N$
$1 \leq x \leq 2 * 10^3$
There won't be more than 10^3 programmers with the same rating.
Time Limit: 1 sec
Memory Limit: 256 MB

Sample Test Case

Input	Output
5 3 1 2 3 2 1 1 5 4 1 2 3 1 4 3	3 1 2

Explanation
For the first showdown , tourist considers all the programmers and tries no find the pair of programmers with sum of rating equal to his rating i.e. 4.

Possible pairs:
1st and 3rd programmer (1,3),
2nd and 4th programmer (2,2),
3rd and 5th programmer (3,1),