E - Interstellar Reunion

It's the year 102015. Space travelers from other galaxies have returned home to attend a reunion. For about a hundred thousand years, they have been part of many different inter-galactic expeditions searching for a new planet as a home for humanity. Although the travelers look quite young, some of them are as old as 10^5 years because of the time dilation between space and earth.

Mr. Kapono Khan, the 1500th president of National Science Society, wants to arrange a game tournament in their honor. All the members of the society along with the space travelers will participate in this game. Before that, he has to divide the participants in different teams. Mr. Khan thought, the best way is to minimize the age difference of team members. To do it, first he needs to know the number of participants with age in specific ranges. Now he appoints you to answer all his questions.

Mr. Khan's queries will always be in a form **A B** denoting the start and end of the range. For each query, you have to count the number of participants whose age is between **A** and **B**.

Input

The first line of input will contain an integer, **T(<=50)** the number of test cases.

Each case starts with the number of participants, ***k*(<=10^5)**.
Then a line with ***k*** integers will follow which are the ages of all participants. Ages are integers and in range **[0, 100000]**.
Then an integer **q (1<=q<=10^5)** will denote the number of queries.
Each query will be in the form of two integers:
a b (1<=a<=b<=10^5)

Same queries can occur multiple times in a single test case. Two cases will be separated by a blank line between them.

Output

Output of each case will start with "Case x:" where x is the case number.
Then you have to print q lines with one integer showing the result of each query.

Sample Input	Sample Output
2 5 1 2 4 2 6 4 2 3 5 6 1 6 1 6 8 2 1 1 7 4 9 7 4 3 6 9 4 4 4 8	Case 1: 2 1 5 5 Case 2: 3 2 4