Flowers

Time Limit: 2000 MS Memory Limit: 65535 KB

## **Description**

As is known to all, the blooming time and duration varies between different kinds of flowers. Now there is a garden planted full of flowers. The gardener wants to know how many flowers will bloom in the garden in a specific time. But there are too many flowers in the garden, so he wants you to help him.

## **Input**

The first line contains a single integer t (1 <= t <= 10), the number of test cases.

For each case, the first line contains two integer N and M, where N (1 <= N <= 10^5) is the number of flowers, and M (1 <= M <= 10^5) is the query times.

In the next N lines, each line contains two integer Si and Ti (1 <= Si <= Ti <= 10^9), means i-th flower will be blooming at time [Si, Ti].

In the next M lines, each line contains an integer Ti, means the time of i-th query.

## **Output**

For each case, output the case number as shown and then print M lines. Each line contains an integer, meaning the number of blooming flowers.

Sample outputs are available for more details.

## **Sample Input**

2

1 1

5 10

4

2 3

1 4

4 8

1

4

6

## **Sample Output**

Case #1:

0

Case #2:

1

2

1

## **Source**

Cloud