code jam kickstart

Practice Mode Rank: 677 Score: 0

Kickstart Practice Round 2018

Submissions

GBus count

9pt Not attempted **662/821 users** correct (81%)

15pt Not attempted **628/659 users** correct (95%)

Googol String

7pt Not attempted **377/425 users** correct (89%)

12pt Not attempted **247/353 users** correct (70%)

Sort a scrambled itinerary

11pt Not attempted **383/421 users** correct (91%)

15pt Not attempted **352/382 users** correct (92%)

Sums of Sums

8pt Not attempted **228/273 users** correct (84%)

28pt Not attempted **37/150 users** correct (25%)

Top Scores

Artie	105
Ayush.Agrawal	105
zzxzxzzxz	105
mr.Nilesh	105
Doju	105
VietaFan	105
JohnSmith	105
wilsonlym	105
pedrosorio	105
ivanilos	105

Problem A. GBus count

This contest is open for practice. You can try every problem as many times as you like, though we won't keep track of which problems you solve. Read the Quick-Start Guide to get started.

Small input 9 points	Solve A-small
Large input 15 points	Solve A-large

Problem

There exists a straight line along which cities are built.

Each city is given a number starting from 1. So if there are 10 cities, city 1 has a number 1, city 2 has a number 2,... city 10 has a number 10.

Different buses (named GBus) operate within different cities, covering all the cities along the way. The cities covered by a GBus are represented as 'first_city_number last_city_number' So, if a GBus covers cities 1 to 10 inclusive, the cities covered by it are represented as '1 10'

We are given the cities covered by all the GBuses. We need to find out how many GBuses go through a particular city.

Input

The first line contains the number of test cases (**T**), after which **T** cases follow each separated from the next with a **blank** line.
For each test case,
The first line contains the number of GBuses.(**N**)
Second line contains the cities covered by them in the form
$\mathbf{a_1\ b_1\ a_2\ b_2\ a_3\ b_3 ... a_n\ b_n}$
where GBus1 covers cities numbered from a_1 to b_1, GBus2 covers cities numbered from a_2 to b_2, GBus3 covers cities numbered from a_3 to b_3, upto **N** GBuses.
Next line contains the number of cities for which GBus count needs to be determined (**P**).
The below **P** lines contain different city numbers.

Output

For each test case, output one line containing "Case #T_i:" followed by **P** numbers corresponding to the number of cities each of those **P** GBuses goes through.

Limits

1 <= **T** <= 10
$\mathbf{a_i}$ and $\mathbf{b_i}$ will always be integers.

Small dataset

1 <= **N** <= 50
1 <= $\mathbf{a_i}$ <= 500, 1 <= $\mathbf{b_i}$ <= 500
1 <= **P** <= 50

Large dataset

1 <= **N** <= 500
1 <= $\mathbf{a_i}$ <= 5000, 1 <= $\mathbf{b_i}$ <= 5000
1 <= **P** <= 500

Sample

Input

```
2
4
15 25 30 35 45 50 10 20
2
15
25

10
10 15 5 12 40 55 1 10 25 35 45 50 20 28 27 35 15 40 4 5
3
5
10
27
```

Output

```
Case #1: 2 1
```

```
Case #2: 3 3 4
```

Explanation for case 1:
2 GBuses go through city 15 (GBus1 [15 25] and GBus4 [10 20])
1 GBus goes through city 25 (GBus1 [15 25])