

(/)

Problems (/problems) / classical (/problems/classical) / Shoot and kill

My status (/status/BGSHOOT,rayhan50001/) Status (/status/BGSHOOT/) Ranking (/ranks/BGSHOOT/)



## BGSHOOT - Shoot and kill

*no tags*

The problem is about Mr.BG who is a great hunter. Today he has gone to a dense forest for hunting and killing animals.

Sadly, he has only one bullet in his gun. He wants to kill as many animals as possible with only one bullet.

He has already known the information of duration availability of all animals of the forest.

So, he is planning to shoot at a time so that he could kill maximum animal.

### Input

Input begins with an integer **N** denoting total numbers of animals.

Next **N** lines contains the duration of availability of animal denoting by X (Starting time) and Y (Ending time) .

Then, there will be **Q**, denoting the total numbers of queries to be answer.

Each query giving two integer **L** and **R**, **L** denoting the time hunter will come to forest and begins shooting

and **R** denoting last time upto which he will stay at forest for hunting.

### Output

For each query output an integer denoting maximum numbers of animals he could kill by shooting at a time during L and R (inclusive).

#### Constraints:

 $1 \leq N, Q \leq 100000$ 
 $1 \leq X, Y, L, R \leq 1000000000$ 

### Example

Input:

```
4
1 2
2 3
4 5
6 7
4
1 5
2 3
4 7
5 7
```

Output:

```
2
2
1
1
```

[Submit solution! \(/submit/BGSHOOT/\)](/submit/BGSHOOT/)

hide comments



akt\_1998 (/users/akt\_1998): 2017-07-13 15:54:25  
cakewalk ;)



sharif ullah (/users/forhad\_sidhu): 2017-06-02 17:26:17

if u are beginner then need solution??? ha ha!!!!!!! so,first search co-ordinate compression in google and then take pen and paper then choose DS then solve it



mycode\_123 (/users/mycode\_123): 2017-04-09 11:34:12

Nice problem....learnt new thing!:) lazy+seg tree+compression



realflash (/users/realflash): 2016-07-25 15:01:26

segment tree, lazy propagation,path compression :)

**Last edit: 2016-07-25 15:07:22**



SUBHAM SANGHAI (/users/bit\_coder2k14): 2016-06-03 20:24:30

Awesome Problem.. BIT+segment tree+path compression.. Everything in one qstn..



suggu (/users/sagar23): 2016-05-31 08:52:37

1st query - the maximum no. of animal will be killed at time =2 output = 2(1 2 and 2 3)

3rd query - the maximum no. of animal will be killed at time =4 output =1(4 7 or 6 7)

**Last edit: 2016-05-31 09:16:10**



BISHAL GAUTAM (/users/bishalg): 2016-05-15 13:15:12

If you had read carefully there is a line "by shooting at a time"....So, question is asking maximum number of segment that could be hit by any one of point from L to R. Hope it helps.



akshayvenkat (/users/akshayvenkat): 2016-05-13 19:50:28

is the output correct?

shouldn't it be 3 1 2 1?



it\_is\_me (/users/it\_is\_me): 2016-05-12 12:17:36

somebody elaborate output please

Leave a Comment

Publish

Notes:

1. Don't post any source code here.
2. Please be careful, leave short comments only. Don't spam here.
3. For more discussion (hints, ideas, solutions) please visit our forum (/forum).
4. Authors of the problems are allowed to delete the post and use html code here (e.g. to provide some useful links).

🚀 Submit solution! (/submit/BGSHOOT/)

Added by: BISHAL GAUTAM  
(/users/bishalg)  
Date: 2016-05-07  
Time limit: 0.5s  
Source limit: 50000B  
Memory limit: 1536MB  
Cluster: Cube (Intel G860) (/clusters/)  
Languages: All except: ASM64 GOSU JS-MONKEY