One Dimensional Kingdoms

Problem code: ONEKING

Read problems statements in Mandarin Chinese and Russian.

N one dimensional kingdoms are represented as intervals of the form $[a_i , b_i]$ on the real line.

A kingdom of the form **[L, R]** can be destroyed completely by placing a bomb at a point **x** on the real line if **L** $\leq x \leq$ **R**.

Your task is to determine minimum number of bombs required to destroy all the one dimensional kingdoms.

Input

- First line of the input contains **T** denoting number of test cases.
- For each test case, first line contains **N** denoting the number of one dimensional kingdoms.
- For each next **N** lines, each line contains two space separated integers a_i and b_i.

Output

For each test case , output an integer denoting the minimum number of bombs required.

Constraints

Subtask 1 (20 points) : $1 \leq T \leq 100 , 1 \leq N \leq 100 , 0 \leq a_i \leq b_i \leq 500$

Subtask 2 (30 points) : $1 \leq T \leq 100 , 1 \leq N \leq 1000 , 0 \leq a_i \leq b_i \leq 1000$

Subtask 3 (50 points) : $1 \leq T \leq 100 , 1 \leq N \leq 10^5, 0 \leq a_i \leq b_i \leq 2000$

Example

Input:
1
3
1 3
2 5
6 9

Output:
2

Explanation

There are three kingdoms [1,3] ,[2,5] and [6,9]. You will need at least 2 bombs
to destroy the kingdoms. In one of the possible solutions, you can place two bombs at x = 2 and x = 6 .

Author:	nssprogrammer
Tester:	shiplu
Date Added:	2-12-2014
Time Limit:	0.5 sec
Source Limit:	50000 Bytes
Languages:	ADA, ASM, BASH, BF, C, C99 strict, CAML, CLOJ, CLPS, CPP 4.3.2, CPP 4.8.1, CPP11, CS2, D, ERL, FORT, FS, GO, HASK, ICK, ICON, JAVA, JS, LISP clisp, LISP sbcl, LUA, NEM, NICE, NODEJS, PAS fpc, PAS gpc, PERL, PERL6, PHP, PIKE, PRLG, PYTH, PYTH 3.1.2, RUBY, SCALA, SCM guile, SCM qobi, ST, TCL, TEXT, WSPC

SUBMIT

Comments

brobear1995 *@ 5 Jan 2015 11:12 AM*

Nice Problem

Need help? Post a comment. But before that please spare a moment to read the guidelines.

Your name:
henviso

Comment: *

SUCCESSFUL SUBMISSIONS

User	Score	Mem	Lang	Solution
shuxxkk	100.000	0.3M	PAS fpc	View
alex_2oo8	100.000	0.6M	PAS fpc	View
daophankhai	100.000	1.8M	PAS fpc	View
karans123	100.000	2.2M	C	View
shashu95	100.000	2.2M	C	View
jugal10_	100.000	2.2M	C	View
sudipto_lodh04	100.000	2.2M	C	View
rajesh_jangid6	100.000	2.3M	C	View
shaavi	100.000	2.3M	C	View
rohank	100.000	2.3M	C	View
pro_2911	100.000	2.3M	C	View
atintaparia	100.000	2.3M	C	View

1 of 156 Next »

Save

CodeChef is a non-commercial competitive programming community

CodeChef - A Platform for Aspiring Programmers

CodeChef was created as a platform to help programmers make it big in the world of algorithms, **computer programming** and **programming contests**. At CodeChef we work hard to revive the geek in you by hosting a **programming contest** at the start of the month and another smaller programming challenge in the middle of the month. We also aim to have training sessions and discussions related to **algorithms, binary search**, technicalities like **array size** and the likes. Apart from providing a platform for **programming competitions**, CodeChef also has various algorithm tutorials and forum discussions to help those who are new to the world of **computer programming**.

Practice Section - A Place to hone your 'Computer Programming Skills'

Try your hand at one of our many practice problems and submit your solution in a language of your choice. Our **programming contest** judge accepts solutions in over 35+ programming languages. Preparing for coding contests were never this much fun! Receive points, and move up through the CodeChef ranks. Use our practice section to better prepare yourself for the multiple **programming challenges** that take place through-out the month on CodeChef.

Compete - Monthly Programming Contests and Cook-offs

Here is where you can show off your **computer programming** skills. Take part in our 10 day long monthly **coding contest** and the shorter format Cook-off **coding contest**. Put yourself up for recognition and win great prizes. Our **programming contests** have prizes worth up to Rs.20,000 and $700lots more CodeChef goodies up for grabs.

Discuss

Are you new to **computer programming**? Do you need help with algorithms? Then be a part of CodeChef's Forums and interact with all our programmers - they love helping out other programmers and sharing their ideas. Have discussions around **binary search, array size, branch-and-bound, Dijkstra's algorithm, Encryption algorithm** and more by visiting the CodeChef Forums and Wiki section.

CodeChef Community

As part of our Educational initiative, we give institutes the opportunity to associate with CodeChef in the form of Campus Chapters. Hosting **online programming competitions** is not the only feature on CodeChef. You can also host a **coding contest** for your institute on CodeChef, organize an **algorithm** event and be a guest author on our blog.

Go For Gold

The Go for Gold Initiative was launched about a year after CodeChef was incepted, to help prepare Indian students for the **ACM ICPC** World Finals competition. In the run up to the **ACM ICPC** competition, the Go for Gold initiative uses CodeChef as a platform to train students for the **ACM ICPC** competition via multiple warm up contests. As an added incentive the Go for Gold initiative is also offering over Rs.8 lacs to the Indian team that beats the 29th position at the **ACM ICPC** world finals. Find out more about the Go for Gold and the **ACM ICPC** competition here.