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## Setting the video

P40128\_en

Quart Concurs de Programació de la FME (3 de maig de 2007)

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Professor Oak is a great fan of *Takeshi's castle*. So much, that he has bought a satellite antenna to watch the show in several European channels. Professor Oak has a guide of all the channels of Europe, and wants to set his video to record as many episodes as possible. But it is not easy: The video only can record a channel at a time. Moreover, the episodes can have different lengths (depending on how they are edited, the advertiments, etc).

Can you help professor Oak? Write a program that, given the beginning time and end time of the broadcast of all the episodes of *Takeshi's castle* in all the european channels during several days, computes the maximum number of episodes that can be recorded every day.

### Input

Input consists of several cases. Each case has a natural number  $1 \leq n \leq 10^5$  followed by  $n$  pairs  $(i_1, f_1), \dots, (i_n, f_n)$  of natural numbers that indicate the beginning time and the end time, *both of them included*, of each episode of a day. For any  $j$  between 1 and  $n$ , assume  $0 \leq i_j \leq f_j \leq 10^9$ .

### Output

For each case of the input, print a line with the maximum number of complete episodes that professor Oak will be able to record that day.

#### Sample input

```
3 100 200 500 780 1000 1040
7 400 1100 500 600 900 1400
200 300 1200 1300 100 700 800 1000
3 0 100 100 1439 0 1439
2 1234 1234 1234 1234
```

#### Sample output

```
3
4
1
1
```

### Problem information

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