

## (Adv.) Competitive Programming

Submit until end of contest, via the [judge interface](#)



### Problem: quidditch (1 second timelimit)

After getting enrolled at the Hogwarts School of Witchcraft and Wizardry you were elected to organise the next Quidditch World Cup. You started with gathering the teams and creating a tournament plan. This was already a big challenge since a game of Quidditch ends when somebody finds the snitch. This causes that games have no fixed time limit. Luckily you found a reliable mentalist who predicts all games (but not the winner).

Now you are working on the second step. You have to decide, how many fields you need to play the tournament. Given a list of the start and end times of all games, please find out how many games take place at the same time.

**Input** The input starts with a single number  $n$  ( $n \leq 300\,000$ ), the number of games. Afterwards  $n$  lines follows. Each of them contains one game with its start time  $s$  and end time  $e$  ( $s < e$ ,  $s, e < 700\,000$ ). All timestamps are pairwise disjoint.

**Output** Please print a single number  $k$ , the number of games taking place at the same time.

#### Sample input

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

#### Sample output

```
1
```

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

```
2
```

3  
1 6  
2 5  
3 4

3