

# Problem H: Haggling over Hours

Time limit: 5 seconds

Hannah is responsible for organizing the time slots at which the Athletics competitions at the Olympic Games are held. She has finally found one that adheres to the constraints imposed by the Olympic committee and the other sports. Regrettably, someone else is responsible for assigning athletes to the time slots. After talking to a few athletes, she realizes that a bad assignment of athletes to time slots could be unfortunate for some of them.



100m hurdles at the 2020 Summer Olympics.  
By Bob Ramsak on [Wikimedia Commons](#)

Therefore, she wants to reduce the maximum number of time slots an athlete could possibly be assigned to by at least one. She wants to do this by removing some of the time slots as this is the easiest way to adjust her plan. Of course, she wants to remove as few time slots as possible. Note that an athlete can only be assigned to several time slots if there is a break of at least one hour in between consecutive ones.

## Input

The input consists of:

- One line with an integer  $n$  ( $1 \leq n \leq 10^3$ ), the number of time slots.
- $n$  lines, each containing two integers  $a$  and  $b$  ( $0 \leq a < b \leq 10^9$ ), the start and end time of a time slot in hours.

It is guaranteed that no two time slots are identical.

## Output

Output the minimum number of time slots which have to be removed such that the maximum number of time slots an athlete could be assigned to decreases by at least one.

### Sample Input 1

```
5
0 2
1 4
3 6
5 8
7 9
```

### Sample Output 1

```
1
```

### Sample Input 2

```
6
0 2
1 3
4 6
5 7
8 10
9 11
```

### Sample Output 2

```
2
```

**Sample Input 3****Sample Output 3**

5 0 2 3 6 1 2 1 4 5 6	2
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