

Railway Station

Problem Description

Given schedule of trains and their stoppage time at a Railway Station, find minimum number of platforms needed.

Note -

If Train A's departure time is x and Train B's arrival time is x , then we can't accommodate Train B on the same platform as Train A.

Constraints

$$1 \leq N \leq 10^5$$

$$0 \leq a \leq 86400$$

$$0 < b \leq 86400$$

Number of platforms > 0

Input

First line contains N denoting number of trains.

Next N line contain 2 integers, a and b , denoting the arrival time and stoppage time of train.

Output

Single integer denoting the minimum numbers of platforms needed to accommodate every train.

Time Limit

1

Examples

Example 1

Input

3

10 2

5 10

13 5

Output

2

Explanation

The earliest arriving train at time $t = 5$ will arrive at platform# 1. Since it will stay there till $t = 15$, train arriving at time $t = 10$ will arrive at platform# 2. Since it will depart at time $t = 12$, train arriving at time $t = 13$ will arrive at platform# 2.

Example 2

Input

2

2 4

6 2

Output

2

Explanation

Platform #1 can accommodate train 1.

Platform #2 can accommodate train 2.

Note that the departure of train 1 is same as arrival of train 2, i.e. 6, and thus we need a separate platform to accommodate train 2.