

**CSES Problem Set****Tasks and Deadlines**TASK | [SUBMIT](#) | [RESULTS](#) | [STATISTICS](#)**Time limit:** 1.00 s **Memory limit:** 512 MB

You have to process  $n$  tasks. Each task has a duration and a deadline, and you will process the tasks in some order one after another. Your reward for a task is  $d - f$  where  $d$  is its deadline and  $f$  is your finishing time. (The starting time is 0, and you have to process all tasks even if a task would yield negative reward.)

What is your maximum reward if you act optimally?

**Input**

The first input line has an integer  $n$ : the number of tasks.

After this, there are  $n$  lines that describe the tasks. Each line has two integers  $a$  and  $d$ : the duration and deadline of the task.

**Output**

Print one integer: the maximum reward.

**Constraints**

- $1 \leq n \leq 2 \cdot 10^5$
- $1 \leq a, d \leq 10^6$

**Example**

Input:

```
3
6 10
8 15
5 12
```

Output:

```
2
```

**Sorting and Searching**

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[Nested Ranges Count](#)[Room Allocation](#)[Factory Machines](#)[Tasks and Deadlines](#)[Reading Books](#)[Sum of Three Values](#)[Sum of Four Values](#)[Nearest Smaller Values](#)

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**Your submissions**