Problem J. Foot Game

Input file:	*standard input*
Output file:	*standard output*
Time limit:	1 second
Memory limit:	512 mebibytes

A group of X people wants to play the following game.

- There are N buttons numbered 1 through N.
- In order to press a button, one person must stand on the button.
- A person can't press multiple buttons simultaneously.
- If they keep pressing the button i during the time interval $[S_i, T_i)$, they score a point. Note that the button is not necessarily pressed by the same person during this time interval.
- They can move between buttons instantly; for example, a person can press a button during the time interval $[1, 2)$, and press another button during the time interval $[2, 3)$.

Compute the minimum possible X that enables them to score at least $N - 1$ points.

Input

N
S_1 T_1
$\vdots$
S_N T_N

- $2 \leq N \leq 10^5$
- $1 \leq S_i < T_i \leq 10^5$

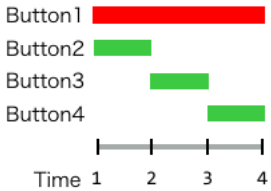
Output

Print the minimum possible X that enables them to score at least $N - 1$ points.

Examples

standard input	standard output
4 1 4 1 2 2 3 3 4	1
5 5 11 2 4 3 4 2 7 5 7	2
4 1 2 1 2015 2015 100000 99999 100000	2

Note



In Sample 1, one person can press buttons 2, 3, and 4, and score three points.