

Most passengers

The Tram Service Company of the city investigated the number of passengers on its trams the data of which needs to be processed by computer. There are N stations on the tram line, including the departure and destination stations. The tram driver has to count the number of people who get on and get off at each station.

Write a program that gives the maximum number of passengers.

Input

The first line of the *standard input* contains the count of stations ($1 \leq N \leq 100$). The next N lines contain the count of people who got on and off ($0 \leq On, Off \leq 50$).

Output

The first line of the *standard output* should contain the maximum number of passengers.

Example

<i>Input</i>	<i>Output</i>
5	5
5 0	
3 4	
0 4	
2 0	
0 2	

Limits

Time limit: 0.1 second

Memory limit: 32 MB

Evaluation: In 40% of tests, the count of data is ≤ 20