

J Just in Time

Time limit: 2s

Arnold is a production manager at a factory at ASML. Recently, there has been increasing demand for lithographic machines, so Arnold receives many orders every day. Thankfully, he receives the orders ahead of time, specifying when each order should arrive. Also, Arnold has a large group of workers he can rely on, since handling n orders would not be easy.



Source: www.asml.com

Since the machines are quite fragile, they cannot sit in the factory after they have been finished, they must be finished exactly at the time they need to be delivered – or as Arnold likes to say – just in time. The workers cannot interrupt working on a machine (it is too complicated), and for each machine, there can only be one worker working on it. Each order takes some time to be prepared, and they also take some time to be delivered. The orders of machines are not necessarily listed in order (Arnold receives them as clients order from the website). Arnold has to figure out how many people he needs to call in to finish all the orders in time. Can you help him calculate that?

Input

The input consists of:

- One line with an integer n ($0 \leq n \leq 10^5$), the number of orders Arnold has received.
- n lines, the i th of which contains three integers a_i , b_i and c_i ($a_i \geq b_i + c_i$, $2 \leq a_i \leq 10^9$, $b_i, c_i \geq 1$), the time when order i must be delivered, how long it takes to process the order, and how long it takes to deliver the order.

Output

Output the number of people needed to finish the orders just in time.

Sample Input 1

2	Sample Output 1
10 5 5	
9 1 8	

Sample Output 1

Sample Input 2

3	Sample Output 2
9 3 2	
10 2 2	
3 2 1	