

# Orders

Input file:            **standard input**  
Output file:           **standard output**  
Time limit:            1 second  
Memory limit:         1024 megabytes

A factory receives  $n$  orders at the beginning of day 1. The  $i$ -th order can be described as two integers  $a_i$  and  $b_i$ , indicating that at the end of day  $a_i$ , the factory needs to deliver  $b_i$  products to the customer.

Given that the factory can produce  $k$  products each day, and at the beginning of day 1 the factory has no product in stock, can the factory complete all orders?

## Input

There are multiple test cases. The first line of the input contains an integer  $T$  ( $1 \leq T \leq 100$ ) indicating the number of test cases. For each test case:

The first line contains two integers  $n$  and  $k$  ( $1 \leq n \leq 100$ ,  $1 \leq k \leq 10^9$ ) indicating the number of orders and the number of products the factory can produce each day.

For the following  $n$  lines, the  $i$ -th line contains two integers  $a_i$  and  $b_i$  ( $1 \leq a_i, b_i \leq 10^9$ ) indicating that the  $i$ -th order require the factory to deliver  $b_i$  products at the end of day  $a_i$ .

## Output

For each test case output one line. If the factory can complete all orders output **Yes**, otherwise output **No**.

## Example

standard input	standard output
2	Yes
4 5	No
6 12	
1 3	
6 15	
8 1	
3 100	
3 200	
4 300	
6 100	

## Note

For the first sample test case, the factory can produce 5 products each day.

- At the end of day 1, there are 5 products in stock so the factory can complete the 2-nd order. After delivery, there are 2 products left in stock.
- At the end of day 6, the factory produces 25 more products. There are 27 products in stock so the factory can complete the 1-st and the 3-rd order. After delivery, there are 0 products left in stock.
- At the end of day 8, the factory produces 10 more products. There are 10 products in stock so the factory can complete the 4-th order. After delivery, there are 9 products left in stock.

For the second sample test case, the factory can produce 100 products each day.

- At the end of day 3, there are 300 products in stock and the factory can complete the 1-st order. After delivery, there are 100 products left in stock.

- At the end of day 4, the factory produces 100 more products. There are only 200 products in stock so the factory cannot complete the 2-nd order.