Meeting Profit Target

A contract note is issued by a broker to all his clients at the end of every day containing the details of all trade transactions made during the entire day and the actual profit made each day.

For each day you have an estimated profit target to meet. If the profit target is more than the actual profit, the unachieved target is added to the next day's target automatically.

You need check if there is any unachieved profit target after the end of all transactions. If yes, print 1 else print 0.

Input Format

The first line of input contains a positive integer q denoting the number of queries.

Input for each query is described below:

The first line contains one positive integer n denoting the number of days.

The next n lines contain two integers a and b denoting the actual and estimated profit for each day of trade respectively.

Constraints

- $1 \leq q \leq 10^{1000}$
- $1 \leq n \leq 10^{10000}$
- $1 \leq a, b \leq 10^{9}$

Output Format

Output q lines containing one integer representing the minimum number of days for which the estimated profit target needs to be modified.

Sample Input 0

```
2
1
10 20
2
15 20
20 15
```

Sample Output 0

```
1
0
```

Explanation 0

Query 1

The estimated profit target for day 1 is more than the actual profit. As the unachieved profit target cannot be cascaded forward the estimated profit target has to be modified.

Query 2

The unachieved profit target of the day 1 of 5 is added to estimated profit target of day 2. The total unachieve profit target at the end of day 2 is 0, hence no modification is required.