



HOME CONTESTS GYM PROBLEMSET GROUPS RATING API CANADA CUP 🖫 SECTIONS

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

A. Free Cash

time limit per test: 2 seconds memory limit per test: 256 megabytes input: standard input output: standard output

Valera runs a 24/7 fast food cafe. He magically learned that next day n people will visit his cafe. For each person we know the arrival time: the i-th person comes exactly at h_i hours m_i minutes. The cafe spends less than a minute to serve each client, but if a client comes in and sees that there is no free cash, than he doesn't want to wait and leaves the cafe immediately.

Valera is very greedy, so he wants to serve all n customers next day (and get more profit). However, for that he needs to ensure that at each moment of time the number of working cashes is no less than the number of clients in the cafe.

Help Valera count the minimum number of cashes to work at his cafe next day, so that they can serve all visitors.

Input

The first line contains a single integer $n (1 \le n \le 10^5)$, that is the number of cafe visitors.

Each of the following n lines has two space-separated integers h_i and m_i $(0 \le h_i \le 23; 0 \le m_i \le 59)$, representing the time when the i-th person comes into the cafe

Note that the time is given in the **chronological** order. All time is given within one 24-hour period.

Output

Print a single integer — the minimum number of cashes, needed to serve all clients next day.

Examples

nput	
30	
3 10	
3 10	
8 0 8 10 8 10 8 45	
output	

input			
3 0 12 10 11 22 22			
output			
1			

Note

In the first sample it is not enough one cash to serve all clients, because two visitors will come into cafe in 8:10. Therefore, if there will be one cash in cafe, then one customer will be served by it, and another one will not wait and will go away.

In the second sample all visitors will come in different times, so it will be enough one cash.

→ **Attention**

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

Codeforces Round #147 (Div. 2)

Finished

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Problem tags (implementation) No tag edit access

→ Contest materials

Announcement

The only programming contests Web 2.0 platform Server time: Nov/30/2016 19:18:46^{UTC+8} (c4). Desktop version, switch to mobile version.