Cman and Programming Tasks
Time Limit : 1 sec

Cman has a set of programming tasks which comes at different time intervals. Each task must be completed within at most 3 hours from the time it arrived. So, if a task comes at time 12:04:02, it must be strictly completed before 15:04:02.

ProChef admins are really good at programming. It takes any admin exactly 15 minutes to complete any task, but they can't solve more than one task at the same time. For example, if an admin starts working on a task at time 06:00:00, he/she will complete task at time 06:14:59 and will be free to start working on another task at 06:15:00 or later.

Given the set of tasks, you have to help Cman to decide minimum number of admins he should hire to complete all the tasks.

Note : A task must be completed within 3 hours from its starting time and an admin can do only a single task at a time.

Input:
First line contains a single integer T representing number of test cases. First line of each test case contains a single integer N representing number of tasks. Next N lines of test case contains the time interval at which the task arrives. Time format is: HH:MM:SS (00 ≤ HH ≤ 23), (00 ≤ MM, SS ≤ 59).

Note : All of the given data is within one day, but not necessarily sorted.

Output:
Print T lines each containing the minimum number of admins required for the corresponding test case.

Constraints:
1 <= T <= 10
1 <= N <= 100000

Sample Input:
1
3
00:01:01
12:12:13
18:00:00

Sample Output:
1