A. The Purifier

Program: purifier.(cpp|java|py)
Input: purifier.in
Balloon Color: Orange

Description

Professor George P. Costas is trying to catch up with the new season of his favorite show "The Purifier" that is scheduled to be released next week. However he has still to watch X hours of the previous season and there are only Y days left.

He wants to know if given his busy schedule for this week, he has enough time to watch the previous episodes. Prof. G.P.C.'s busy schedule for the next Y days is given as a list of Y lines, each containing the busy periods of a day, in the form of time pairs. You can also assume that there are 10 hours in each day devoted to sleeping, eating, etc.

For each test case you should answer with a Yes or a No whether he will be able to finish the previous season or not.

If for example X=10 and Y=2 and the schedule is as follows:

10:00-12:00 13:00-22:00

9:00-17:00

then there will not be enough time for him to catch up before the new season airs.

Input

The input file starts with a line containing the number of test cases $N \le 100$. Each test case starts with a line containing $0 < X \le 100$ and $0 < Y \le 7$ separated by white-space. Y lines follow, each containing up to 10 reserved timeslots, or "-" if that day is a holiday. You can assume that the timeslots are not overlapping (but not sorted) and that they leave at least 10 hours in a day free. The timeslots are given in the form of hh1:mm1-hh2:mm2 and the times are inclusive, i.e. he is busy during hh2:mm2. All times are given in 24h format. The hours can be one or two digits, but the minutes are always two digits.

Output

For each test case you should output the number of the test case (starting from 1), followed by a ".", a space and "Yes" or "No", all in a separate line.

Sample Input / Output

```
purifier.in

2
10 2
10:00-12:00 13:00-22:00
9:00-17:00
15 4
10:00-12:00 13:00-22:00
9:00-17:00
0:00-0:00
```

```
OUTPUT

1. No
2. Yes
```