

Problem C

COUNTING CHAOS

Wolfgang Puck's rival, Emeril Lagasse ("BAM!"), recently set the world culinary record in the category of smallest soufflé measuring in at a mere 2 cm! Wolfgang, not to be outdone, decided that he would set a culinary record of his own: the most symmetric marble cake in the world. This is clearly not an easy feat!



As we all know from Wolfgang's bestselling biography, he is a very superstitious chef. In his attempts to create the symmetric cake, he has vowed to remove the cake from the oven only at a palindromic time, i.e., a time that reads the same when read from left-to-right as right-to-left. Not including the current time, when is the next opportunity for Wolfgang to remove his cake?

Input

On the first line of the input you are given n , the number of attempts Wolfgang makes to make his symmetric cake. The following n lines contain a string formatted as "HH:MM" indicating the current time on a twenty-four hour clock. (So $0 \leq HH \leq 23$ and $0 \leq MM \leq 59$ and "00:00" follows "23:59")

Output

For each attempt, output a string indicating the next palindromic time (not including the current time) on a single line formatted as "hh:mm". When determining if HH:MM is palindromic, ignore all leading zeroes in HH. If HH is zero then ignore all leading zeroes in MM.

Sample Input

```
3
00:00
23:30
14:59
```

Output for the Sample Input

```
00:01
```

23:32

15:51

Sean McIntyre

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