

11309 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

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3
00:00
23:30
14:59
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Sample Output

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00:01
23:32
15:51
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