

# The 2020 ICPC Vietnam Southern Provincial Programming Contest University of Science, VNU-HCM October 25, 2020



# Problem B Rap Songs

Time Limit: 1 second Memory Limit: 256 megabytes

Phidang likes watching Rap Viet show on TV every Saturday evening. After each show, he usually downloads all the rap songs into his cell phone and listens to them at work. When listening, he likes to turn on crossfading between the rap songs, so during the last seconds of a song, it will slowly fade out while the next one fades in. This



happens between any two consecutive songs, but the beginning of the first song and the last song will be played normally.

Given the crossfade time, Phidang wonders how much time does it take him to listen to his whole rap album.

#### Input

The input consists of:

- Two integers n and  $(1 \le n \le 100, 1 \le c \le 10)$ , indicating the number of rap songs in Phidang's album and the crossfade time in seconds.
- In the next n lines, each line contains a string of the form m:ss (0:30  $\leq$  m:ss  $\leq$  9:59), denoting the song length (a single digit for minutes and two digits for the remaining seconds).

## **Output**

Output contains a single string of the form hh:mm:ss, giving the total time to listen to the whole album (the first two digits are for the number of whole hours, two digits for the number of remaining whole minutes, and two digits for the remaining seconds).

#### Sample Input

## **Sample Output**

3 5	00:14:21
3:59	
0:52	
9:40	
1 10	00:06:00
6:00	