
7. Minutes Played

Program Name: Minutes.java

Input File: minutes.dat

One of Jennifer's jobs as an assistant to the girls basketball coach is to keep track of the number of minutes that each girl on the team plays. There are four quarters in a game and the time clock starts at 12:00 (12 minutes, 0 seconds) at the beginning of each quarter and counts down to 0:00 (0 minutes, 0 seconds). Jennifer records the minutes and seconds left in the quarter each time a player enters or leaves the game. You are to write a program that calculates the total playing time of each player.

Input

The first line will contain a single integer n that indicates the number of lines to follow. Each of the next n lines will contain the first name of a player followed by one or more data sets in the form $Qx\ mm:ss\ Qy\ mm:ss$. The quarter that the player entered the game is denoted by x and is followed by the number of minutes and seconds left in that quarter when she entered the game. The quarter the player exited the game is denoted by y and is followed by the number of minutes and seconds left in that quarter when she exited the game.

Output

For each player, print the player's name followed by the number of minutes and seconds that the player played during the game in the format shown in the **Example Output** below.

Assumptions for both Input and Output

The number of minutes will be in the range $[0,12]$ and have no leading zeroes. The number of seconds will always be a two digit integer in the range $[00,59]$.

Example Input File

4

```
Mary Q1 12:00 Q1 2:13 Q2 10:45 Q2 7:33 Q2 4:12 Q3 4:33 Q4 9:27 Q4 0:00
Anne Q1 5:55 Q2 7:34 Q3 5:58 Q4 7:55
Suan Q1 9:21 Q2 10:12 Q2 2:21 Q2 1:08 Q3 12:00 Q3 4:03 Q4 3:13 Q4 0:00
Evie Q2 1:10 Q3 9:21
```

Example Output To Screen

```
Mary 34:05
Anne 20:24
Suan 23:32
Evie 3:49
```