
8. Median Mile

Program Name: MedMile.java

Input File: medmile.dat

James is keeping the times in the mile race for the swim team at his school. Before selecting the swimmers for the district swim meet, the coach wants to know each swimmer's median time from the mile swims that she has swum this year.

The median time is:

- the middle time of an odd number of times sorted from least to greatest.
- the average of the two middle times of an even number of times sorted from least to greatest.

Input

The first line of input will contain a single integer n that indicates the number of swimmers to be considered. Each of the following n lines will contain the swimmer's first name with no spaces followed by a list of times in the form $mm:ss.hh$ where $15 \leq mm \leq 40$ is the number of minutes, $00 \leq ss \leq 59$ is the number of seconds, and $00 \leq hh \leq 99$ is the number of hundredths of seconds. Each of the times will be separated by a single space.

Output

For each swimmer, you will print the student's name and a space followed by her median time in the format $mm:ss.hh$. The hundredths should be truncated, not rounded.

Example Input File

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MARY 21:12.32 22:14.45 23:55.84 24:48.99
ANN 28:16.39 28:10.87 27:04.00 27:05.01 29:29.71
LUCY 33:43.82 28:24.95 30:52.94 29:55.26

Example Output to Screen

MARY 23:05.14
ANN 28:10.87
LUCY 30:24.10