

At the Olympic Games many of the events are judged in the following manner. An individual athlete's performance is judged by a variable number of judges (up to 10). Each of the athletes receives a grade from 0.00 to 10.0 from each of the judges. The performance score of the athletes is obtained by rejecting both the lowest and highest score and taking the average of the remaining scores.

Write a complete C program that will read in data in the following format:

1234 6 4.5 9.3 5.6 8.7 9.2 5.9

where 1234 represents the athlete id

6 represents the number of judges

and the remaining numbers represent the 6 scores

Your program is to compute the average score for each athlete. It should then print the athlete id followed by the average score for that athlete. In addition it should determine which athlete had the highest score and print a message with the athlete's name and average.

Data to be used

2365 7 8.8 7.4 6.3 7.1 5.6 7.3 6.4

2345 6 8.9 8.9 4.5 4.5 6.7 9.2

4356 8 8.8 8.8 5.7 8.9 9.4 2.3 6.7 5.9

7865 5 7.8 5.3 2.3 6.9 9.9

2319 6 8.8 8.8 8.8 8.8 8.8 8.8

4508 7 8.9 9.4 2.3 5.6 3.4 9.9 9.9

Otherwise, the number of games below 0.50000 is the number of losses minus the number of wins. This value should be printed, with an appropriate message (saying if this is games above or games below 0.50000).

For example, for the team shown above, the team is 2 games below 0.50000 (5 is less than 7, and $7 - 5 = 2$).

5. Then the program should skip a few lines of output and repeat the entire series of steps for the next team, and so on, until the last team has been processed. (You must decide how to recognize that the last team has been processed.) At that point, print the total number of teams in the league, then stop.

DATA: Be sure to read in data for about 8-10 teams. Make sure that at least three teams have completed their season, and at least three have not. Have at least two teams with more wins than losses, at least one with an even record, and at least two with more losses.

Here is a complete set of output for a typical team:

```
team 9867
4 wins    16 losses
total number of games played is 20
the season is finished
the winning percentage is 0.20000
the team is 12 games below 0.50000
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OPTIONALS: 1. Compute the team's record if it wins all of the remaining games (give the winning percentage and games above/below 0.50000), and the record if it loses all of the remaining games.

2. Keep track of the team with the best winning percentage, and of the team which is the most games above 0.50000. Print them out at the end of the processing.