

**DWITE Online Computer Programming Contest
October 2006**

Problem 3

Basketball Statistics II

Ms. Knight, who coaches the senior girls' basketball team, wishes to know who her top five shooters are. She needs to know this so she can send her best shooters onto the court at the end of a close game. Ms. Knight wishes to calculate a statistic for each player called *points per minute (ppm)*. This is calculated by dividing the points scored by a player by the number of minutes that the player has played on the court.

The input file (**DATA31.txt** for the first submission and **DATA32.txt** for the second submission) will contain one set of data. The first line contains N, the number of players on the team, $0 < N \leq 25$. For each player on the team, there will be 5 lines of data

- their name (in upper case)
- the number of foul shots made (one point each)
- the number of field goals made (two points each)
- the number of three-point baskets made (three points each)
- the number of minutes played, an integer > 0 .

The output file (**OUT31.txt** for the first submission and **OUT32.txt** for the second submission) will list the top five players in order, with their *ppm* rounded to three decimal places. Separate their name from their ppm with a hyphen (-). There will be no ties.

<u>Sample Input</u>	<u>Sample Output</u>
6 KATIE 24 12 4 85 JULIA 25 13 9 97 HILLARY 34 19 2 125 CALLIE 12 6 8 120 AMANDA 14 16 3 90 JOHANNA 12 8 6 60	JULIA-0.804 JOHANNA-0.767 KATIE-0.706 HILLARY-0.624 AMANDA-0.611