Code Test: Most Valuable Player

Tucan Tournament is a tournament where several players compete in several sports. Right now, the sports played are basketball and handball games. They plan to add more sports in the future.

You have been contacted to create a program to calculate the Most Valuable Player (MVP) of the tournament.

You will receive a set of files, each one containing the stats of one game. Each file will start with a row indicating the sport it refers to.

Each player is assigned a unique nickname.

Each file represent a single game.

The MVP is the player with the most rating points, adding the rating points in all games.

A player will receive 10 additional rating points if their team won the game. Every game must have a winner team. One player may play in different teams in different games, but not in the same game.

This program should identifies corrupted files that do not comply with the game specifications. Any such files will be excluded from the MVP calculation

**Basketball:**

Each row will represent one player stats, with the format:

player name;nickname;number;team name;scored points;rebounds;assists

This table details the rating points each player in a basketball game receives:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Scored point | Rebound | Assist |
| Points per category | 2 | 3 | 1 |

E.g. a player with 10 scored points, 5 rebounds and no assists will be granted 35 rating points (10\*2 + 5\*3 + 0\*1 ).

The winner team is the one with more scored points.

Example:

BASKETBALL

player 1;nick1;4;Team A;10;2;7

player 2;nick2;8;Team A;0;10;0

player 3;nick3;15;Team A;15;10;4

player 4;nick4;16;Team B;20;0;0

player 5;nick5;23;Team B;4;7;7

player 6;nick6;42;Team B;8;10;0

**Handball:**

Each row will represent one player stats, with the format:

player name;nickname;number;team name;goals made;goals received

This table details the rating points each player in a handball game receives:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Initial rating points | Goal made | Goal received |
| Points per category | 20 | 2 | -1 |

E.g. a player with 1 goals made and 10 received will be granted 12 rating points (20 + 1\*2 - 1\*10 = 12).

The winner team is the one with more goals made.

Example:

HANDBALL

player 1;nick1;4;Team A;0;20

player 2;nick2;8;Team A;15;20

player 3;nick3;15;Team A;10;20

player 4;nick4;16;Team B;0;25

player 5;nick5;23;Team B;12;25

player 6;nick6;42;Team B;8;25

**Notes:**

We are interested in how you structure your code so to be easily extendable, complies with best practices, and is easy for others to modify / understand. **No UI or database access code is needed**.

You can use any programming language nad library you want.