

Italian Football League

Write a program to manage data about the Italian Football League. Constraints: functions **getPlayer**(team, number) and **listPlayers** (team) should be as time efficient as possible.

Function **addTeam**(name) add the team name to the system, while **addPlayer** (team, surname, name, number) adds to a 'team' information about a player (like name, surname, nationality and the number of his shirt in the team).

Function **printTeams**() print on screen all teams separated by comma ','.

Function **getPlayer**(team, number) returns a string with information about the player.

Function **listPlayers** (team) print on screen the players information on different lines, one per each player: the players are printed ordered by their shirt number.

Function **setCost**(team, number, price) insert the money value in thousands of Euros of the player while function **getCost**(team, number) returns the value of the player in thousands of Euros.

Function **maxValue**() returns the cost of the most expensive player in the football league.

Function **totalValue**() returns the total value of all players in the league.

Function **teamValue**(team) returns the total value of players of a team.

Example:

```
void main(){
    addTeam("Milan");
    addTeam("Juventus");
    addTeam("Inter");
    printTeams();
    // Visualize: "Inter, Juventus, Milan"
    addTeam("Roma");

    addPlayer("Roma", "Totti", "Francesco", "Italy", 10);
    addPlayer ("Inter", "Eto'o", "Samuel", "Cameroon", 9);
    addPlayer ("Milan", "Beckham", "David", "England", 32);
    addPlayer ("Juventus", "Delpiero", "Alex", "Italy", 10);
    addPlayer ("Milan", "Pirlo", "Andrea", "Italy", 14);
    addPlayer ("Milan", "Pato", "Alexandre", "Brazil", 7);
    printf("%s", getPlayer("Roma", 10)); //Visualize "Francesco Totti (Roma)"

    listPlayers("Milan");
    //Visualize players ordered by their shirt number
    // "7. Alexandre Pato (Brazil)" on first line
    // "14. Andrea Pirlo (Italy)" on second line
    // "32. David Beckham (England)"on third line

    setCost("Roma", 10, 40000);
    setCost("Inter", 9, 30000); setCost("Milan", 32, 10000);
    setCost("Milan", 7, 20000); setCost("Milan", 14, 30000);
    printf("Max value : %d\n", maxValue());
    printf("Total Value : %d\n", totalValue());
    printf("Milan value : %d\n", teamValue("Milan"));
```