FIFA asked you developing a computerized system to organize the world cup teams and matches results:

Each team has name, code, No. of wins, No. of draws, No. of loses, Goals difference

Example of Teams information file:

```
Moroco,MAR,2,1,0,3
Belgium,BEL,1,1,1,-1
Croatia,CRO,1,2,0,3
Canada,CAN,0,0,3,-5
```

Example of Teams players file:

```
*MAR
1-Yassine
2-Monir
3-Ahmed
4-HAKIMI
5-MAZRAOUI
6-AGUERD
7-SAISS
8-Jawad
9-DARI
10-Badr
11-Yahya
12-Sofyan
13-ZIYECH
14-Azzedine
15-Anass
16-Ilias
17-Zakaria
18-Selim
19-Sofiane
20-BOUFAL
21-JABRANE
22-SABIRI
*BEL
1-ALDERWEIRELD
2-Arthur
3-THEATE
4-Wout
....
```

To Do:

Phase one:

1. Read the file *teams.txt* that contains the teams' information into a linked list of type TEAM.
2. Your program should calculate and store the points for each team as follow

   Points = 3*No. of wins + 1*No. of draw

3. After that, you should sort the teams based on the attained points using the Radix Sort. After sorting, if two teams have the same number of points, the team with greater goals difference should appear first.
4. Your program should support the ability of add, modify and delete any team.
5. Your program should support printing all teams with their relevant information in adequate format.
6. Save back the teams information (sorted) to the file *teamsInfo.txt*

Phase two

7. The user should have the ability to create a match: Choose two teams (based on their teams' codes) from the previously created list in phase one, if the chosen team is not listed an appropriate error message should be shown.
8. Read the teams' players lists from the file *players.txt*. The first 11 players (elementary players) should be stored in a linked list of type PLAYER, while the other players (spare players) should be stored into a Queue, i.e. you should create one linked list and one queue for each team.
9. The team coach has the ability to change the players between elementary and spare; the player who is deleted from the elementary should be added to the spare queue.
10. The match referee has the ability to issue the red card to any player; in this case, the player should be deleted from the elementary list.
11. Your program should support printing all elementary players for a specific team.
12. Save back the players information to the file *playersInfo.txt*

Grading policy and general notes on the project:

1. Your application should have all functionalities working properly. Twenty marks will be graded for the functionality of the project.
2. The following notes will make up the remaining 10 marks of the grade:
   a. There has to be adequate documentation and comments in the code (i.e., functions, loops, etc.).
   b. Your code should follow the code convention (i.e., spaces, indentations, etc.); and
   c. Your application should contain a menu to allow the user to select which option (s) he would like to run (Choose any suitable menu that contains all functionalities).