Application for Managing Football Team Results

Match Data Collection: ∅

We assume that teams have unique names. Each match is described by the following properties:

- name the name of the opposing team.
- status whether our team was the home team (HOME) or the away team (AWAY).
- score the match score in the format home_team_goals:away_team_goals.
- audience the number of spectators at the match.

Example collection:

```
2
       {
3
          "name": "TEAM A",
          "status": "HOME",
4
5
           "score": "3:1",
           "audience": 1000
7
8
     {
9
           "name": "TEAM B",
           "status": "AWAY",
10
           "score": "3:2",
11
12
           "audience": 10000
13
     },
14
     {
          "name": "TEAM C",
15
16
           "status": "HOME",
17
           "score": "3:4",
           "audience": 2000
18
19
       }
20 ]
```

Required Functionalities: ∅

1. Calculate the team's points:

- o Win: 3 points, draw: 1 point, loss: 0 points.
- Calculate the total number of points the team has earned in the competition.

2. Longest home unbeaten streak:

o Determine the longest streak of matches in which the team did not lose when playing as the home team.

3. Goal balance:

Calculate the balance of goals scored and conceded by the team during the competition.

4. Average attendance:

o Determine the average number of spectators at the team's matches.

5. Win balance at home vs. away:

o Compare whether the team won more matches at home or away.

6. Biggest victory and defeat:

• Identify the opponent against whom the team suffered the biggest defeat (largest goal difference against) and the opponent against whom the team won the most convincingly (largest goal difference in favor).

7. Goal per minute statistics:

 Assuming each match lasts 90 minutes (two halves of 45 minutes), calculate how often the team scores and concedes a goal on average per minute.

8. Creating the competition table:

- Prepare several collections containing match results for different teams. Ensure that all teams have played matches and rematches.

 Based on this, generate a competition table, sorting teams by:
 - number of points,
 - goal difference,
 - result of the head-to-head matches.

If the ranking cannot be determined by the above criteria, consider:

- the number of goals scored,
- the number of goals conceded.

If there is still no clear ranking, the teams will occupy the same place (ex aequo).

This structure allows for comprehensive management of football team results and analysis of the competition based on specific criteria.