# Come on the Arsenal!



## Score processor

Given the results for the first number of weeks of a football league season write a program that will process the scores and output the statistics for each team (ordered by Team name) and the current league standings (ordered by points). The results are provided in a text file (*Results.txt* (<a href="https://canvas.qub.ac.uk/courses/11041/files/1679860?wrap=1">https://canvas.qub.ac.uk/courses/11041/files/1679860/download?download frd=1</a>).

(https://canvas.qub.ac.uk/courses/11041/mes/1079000/download:download\_nd=1)

The result for each match is guaranteed to be in the format:

#### <Team1 Team1Score Team2Score Team2>

e.g. Arsenal 4 Spurs 0.

Note: Each team name is one string (i.e. no spaces).

#### **Development suggestions**

- 1. Develop a class to store the details for each team to support the application output, e.g. Team name, Played, Goals For, Goals Against, Win, Draw, Loss and Total Points.
- 2. Read each line (match result) in the text file.
- 3. Use a Collections Map

E.g. private static Map<String, Team> teams = new HashMap<String, Team>();

(String being the team name and Team being the class developed in step 1.)

- 4. Process the results (There are 3 points for a win, 1 for a draw and 0 for a loss.)
- 5. To output the individual team statistics, order the values (alphabetically) by team name, hint use a **SortedSet**
- 6. To output the League tables convert the **values** in the **HashMap** to a **List** Develop and use a **comparator** to order (sort) by Points.

Example output...

Spurs		
Games played	:	3
Goals for	:	2
Goals against	:	4
Wins	:	0
Draws	:	1
Losses	:	2
Points		1
Stoke		
Games played	:	4
Goals for	:	4
Goals against	:	4
Wins	:	1

Draws Losses

Points

Team	Played	For	Against	W	D
Arsenal	3	17	4	3	0
WestHam	3	4	0	2	1
WBA	2	5	1	2	0
Swansea	4	9	4	1	3
Stoke	4	4	4	1	2
Norwich	4	2	6	1	2

2

1

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#### Solutions:

Team-1.java (https://canvas.qub.ac.uk/courses/11041/files/1679857?wrap=1) (https://canvas.qub.ac.uk/courses/11041/files/1679857/download?download\_frd=1)

ComparePoints.java (https://canvas.qub.ac.uk/courses/11041/files/1679858?wrap=1) (https://canvas.qub.ac.uk/courses/11041/files/1679858/download?download frd=1)

ScoreManager.java (https://canvas.qub.ac.uk/courses/11041/files/1679859?wrap=1) (https://canvas.qub.ac.uk/courses/11041/files/1679859/download?download frd=1)

### video code walk through ...

