

Selected Topics in Comp Eng Project

Premier League's Project

In this project, you are **given** a comma separated file to represent matches' statistics of every game during the season of the English Premier League till the 30th round.

Match data includes; the round number, match date, home team, away team, home team's number of goals scored, away team's number of goals scored and the match final result [H: home team wins, A: away team wins and D: drawn].

You are **required** to make a program that stores this data in a graph based data structure that helps your program to construct the league standings for a given round, as shown in the following table that shows the standings for the 20 teams playing in the league after playing 30 rounds.

#	Team	MatchPlayed	W	D	L	Goals For	Goals Against	G Diff	Points
1	Arsenal	30	23	4	3	72	29	43	73
2	Man City	30	22	4	4	78	28	50	70
3	Man United	30	18	5	7	46	37	9	59
4	Newcastle	30	15	11	4	48	24	24	56
5	----	30	--	--	--	--	--	--	--
6	----	30	--	--	--	--	--	--	--
	----	30	--	--	--	--	--	--	--
20	Southampton	30	6	5	19	24	51	-27	23

Also, you have to support a complexity analysis illustration to your program's algorithm in any illustration form; a piece of paper, a presentation slides, ... etc.

As a **bonus** question, you may given a **date** not a round number and you are required to show the standings till that date regardless of the number of games played by each team.