

PRACTICE ASSIGNMENT #2:

FOOTBALL FITNESS PROGRAM

Sarah Jones is the fitness coach for a new five-a-side Futsal team, Pendletown FS, and is keen to improve the fitness of the players by monitoring the results of the players' weekly fitness tests. She tests the players' speed, laps and lap time each week and records the data in a text file (**player_data.txt**).

The data is stored in this format:

Date	Player	Level	Laps	Speed	Lap Time(s)
11 Jan	Harry Keane	9	11	12.5	5.76
11 Jan	Nat Sturridge	8	10	11.5	6.55
11 Jan	Dwayne Vardy	10	11	13	5.54
11 Jan	Kyle Baker	8	10	12	6
11 Jan	Elliott Ramsey	10	11	13	5.54

Football Fitness Levels	
9.0 or below	Fitness level below pace for long games
10.0	Fitness level for amateur player
11.0	Fitness level for above average amateur player
12.0	Fitness level for elite player
13.0	Very high fitness level

Sarah needs to be able to analyse the progress for each player and produce monthly reports to motivate players to improve their fitness levels.

She needs a computer program that will enable her to keep track of individual player performance by calculating the average times and laps over the previous four-week period, using the average fitness levels to select the overall Football Fitness Level shown in the table above.

The results must then be presented as a summary for each player, showing the average for each fitness test and what that fitness level means.

In the final solution, you should demonstrate the use of:

- Data validation
- File input to use the **player_data.txt** file supplied
- Structured code
- Error handling routines



Source files are provided for this exercise; download them from <http://zzed.uk/10583-PA2>