### **Soccer Teams Challenge**

### **Author**

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# **Initial thoughts**

- I knew I needed to find a way to read the file so I could have access to the string.
- I would need to break down the large input string into much smaller pieces.
- I knew I would need to keep track of the calculated scores throughout the entire process.
- Need to determine how I would mark the end of a matchday.
- Would need to sort the data by score and name.

### Problems to solve

- Need to get access to each line of games and the scores associated with them.
- Find a way to access the score in the string that could account for the possibility of multi digit numbers.
- Need to keep a constant variable to hold all the scores through each matchday.
- Need to keep track of a matchday.
- Need logic to compare each game and determine how many points are awarded.
- Make sure the final output is sorted by score and alphabetically.

#### **Solutions**

- Found a readfile method to access the input string.
- Created a nested array that broke down the input into each line using split functions to separate by line breaks and commas between games.
- Found a lastIndexOf method that allowed for the score to be separated from the string of text(allows for multi digit numbers).
- Used a foreach loop to go through each game line and separate out Team 1 and 2.
- parseInt the score so that it can be used as a number for comparisons.
- Created a seenTeams array to help check if a new matchday has occurred. Pushed new teams into the array. Cleared it if seenTeam already includes it.
- Made a currentDay variable and incremented whenever an already seenTeam is repeated.
- Used if statements to compare scores in each game and added appropriate amounts of points to the scoreMap.
- Created a function to format the output into string format.

## **Adjustments**

- Used a trim method to remove extra spacing around the team name text.
- Added an extra sort function to account for alphabetical sorting before score sorting.
- Created a ternary operator to check if the string should say 'pt' or 'pts'.
- Added extra spacing ('\n') to match output format.

#### Tests

Created a test to use the given sample input and output.

- Created a test adding in an extra pair of teams to make sure only 3/4 games are returned.
- Created a test with 2 games per matchday.