ENGLISH FOOTBALL

Presented By: Group 10

LET'S GO!

Content of the Dataset

The Fjelstul English Football Database is a comprehensive database of football matches played in the Premier League and the English Football League from the inaugural season of the Football League (1888-89) through the most recent season (2021-22). Joshua C. Fjelstul, Ph.D, created the database.

The dataset contains several tables, each with different types of data. The tables include the following:

- Seasons
- Teams
- Matches
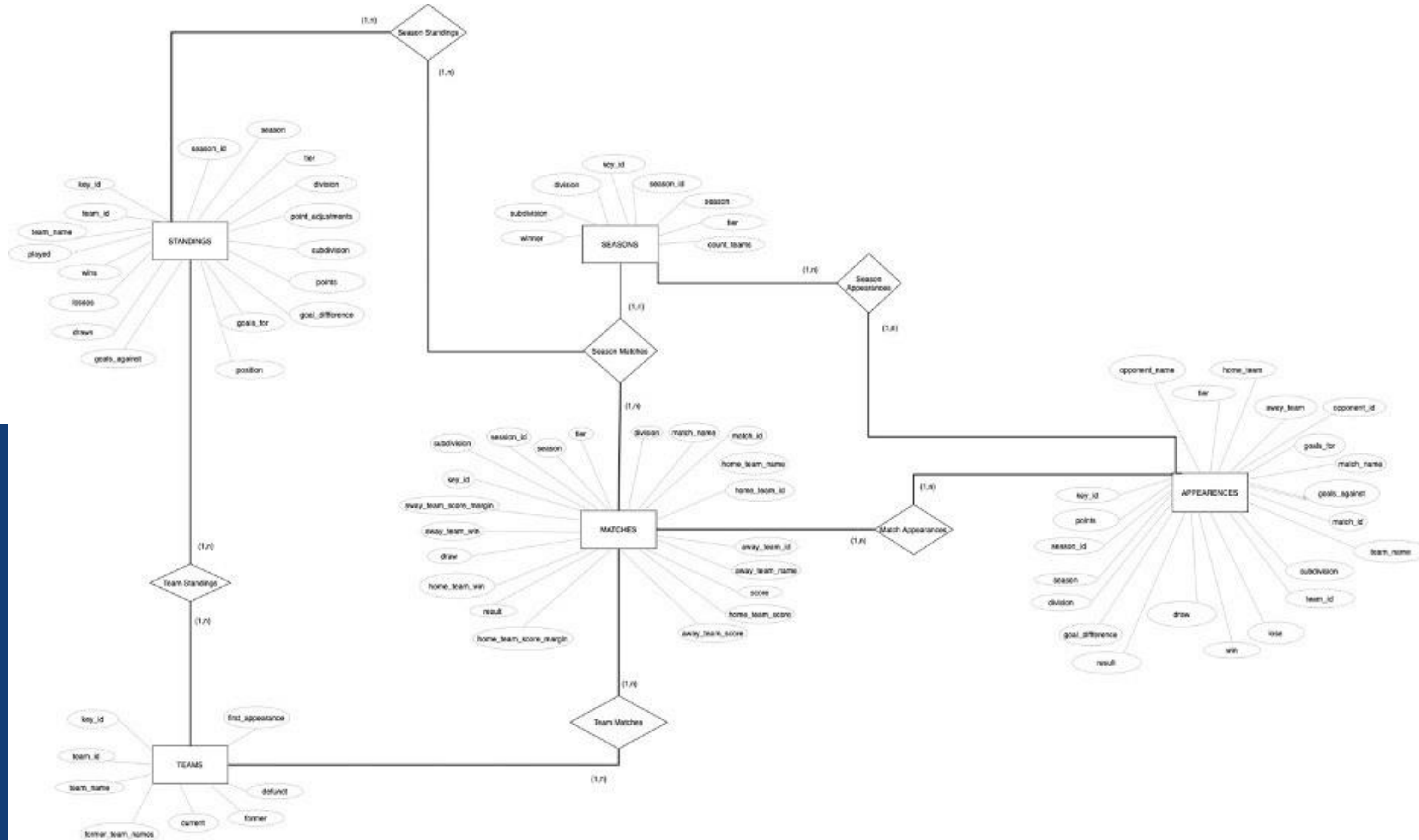- Appearances
- Standings

Business Objective

Here are some business objectives for this dataset that can be used:

- Performance Analysis
- Player Recruitment
- Sponsorship and Marketing
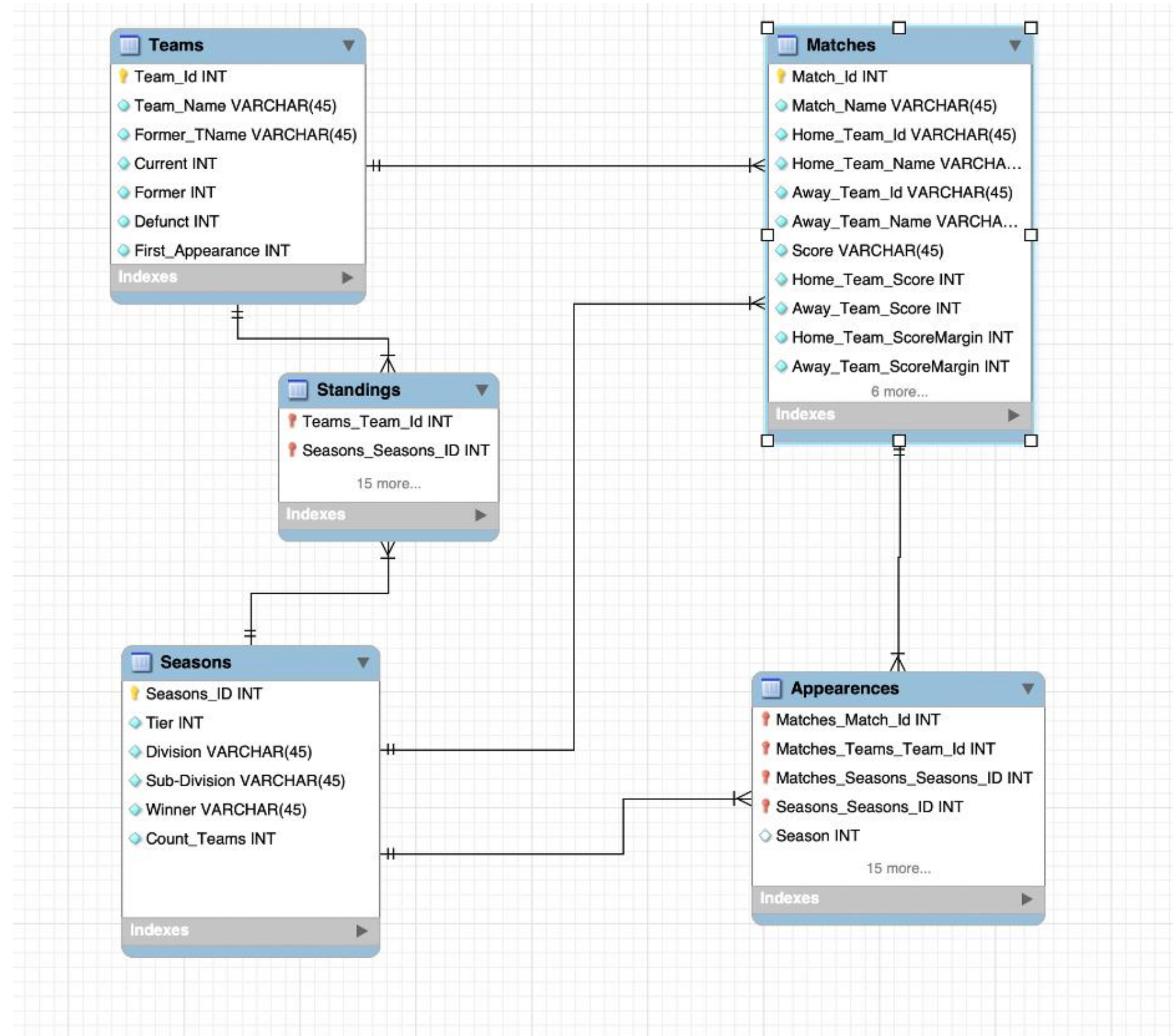- Fan Engagement
- Betting and Fantasy Sports

Conceptual Data Model

Logical Data Model

Physical Data Model With Commands

```
-- MySQL Workbench Forward Engineering

SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;
SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0;
SET @OLD_SQL_MODE=@@SQL_MODE,
SQL_MODE='ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_DAT
E,ERROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION';


-- -----------------------------------------------------
-- Schema Football
-- -----------------------------------------------------


-- -----------------------------------------------------
-- Schema Football
-- -----------------------------------------------------
CREATE SCHEMA IF NOT EXISTS `Football` DEFAULT CHARACTER SET utf8 ;
USE `Football` ;


-- -----------------------------------------------------
-- Table `Football`.`Teams`
-- -----------------------------------------------------
CREATE TABLE IF NOT EXISTS `Football`.`Teams` (
  `Team_Id` INT NOT NULL,
  `Team_Name` VARCHAR(45) NOT NULL,
  `Former_TName` VARCHAR(45) NOT NULL,
  `Current` INT NOT NULL,
  `Former` INT NOT NULL,
  `Defunct` INT NOT NULL,
  `First_Appearance` INT NOT NULL,
  PRIMARY KEY (`Team_Id`))
ENGINE = InnoDB;
```
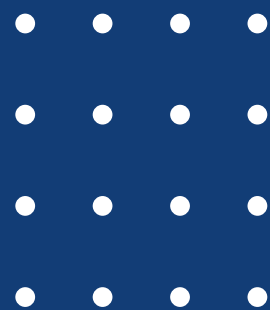
Insight-1

Query 1:

Retrieve the list of matches played by a specific team in a specific season, along with the score and result.

We found all matches played by the team Accrington in season 1888 and the results.


```
/*Query 1:
Retrieve the list of matches played by a specific team in a specific season, along with the score and result */
SELECT m.`match_name`, m.`home_team_name`, m.`away_team_name`, m.`home_team_score`, m.`result` FROM matches m
JOIN appearances a ON (m.`home_team_name` = a.team_name OR m.`away_team_name` = a.team_name) AND
m.season = a.season WHERE a.team_name = 'Accrington' AND a.season=1888;
```

match_name	home_team_name	away_team_name	home_team_sco...	result
Accrington vs Aston Villa	Accrington	Aston Villa		draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw
Accrington vs Aston Villa	Accrington	Aston Villa	1	draw

SQL Used

SELECT m.`match_name`, m.`home_team_name`, m.`away_team_name`, m.`home_team_score`, m.`result` FROM matches m
 JOIN appearances a ON (m.`home_team_name` = a.team_name OR m.`away_team_name` = a.team_name) AND
 m.season = a.season WHERE a.team_name = 'Accrington' AND a.season=1888;

VISUALIZATION

	A	B	C	D	E
1	Row Labels	Count of match_name	Count of away_team_name	Sum of home_team_score	Count of result
2	Accrington	242	242	572	242
3	Aston Villa	22	22	88	22
4	Blackburn Rovers	22	22	110	22
5	Bolton Wanderers	22	22	88	22
6	Burnley	22	22	44	22
7	Derby County	22	22	22	22
8	Everton	22	22	44	22
9	Notts County	22	22	66	22
10	Preston North End	22	22	44	22
11	Stoke	22	22	44	22
12	West Bromwich Albion	22	22	44	22
13	Wolverhampton Wanderers	22	22	88	22
14	Grand Total	484	484	1254	484
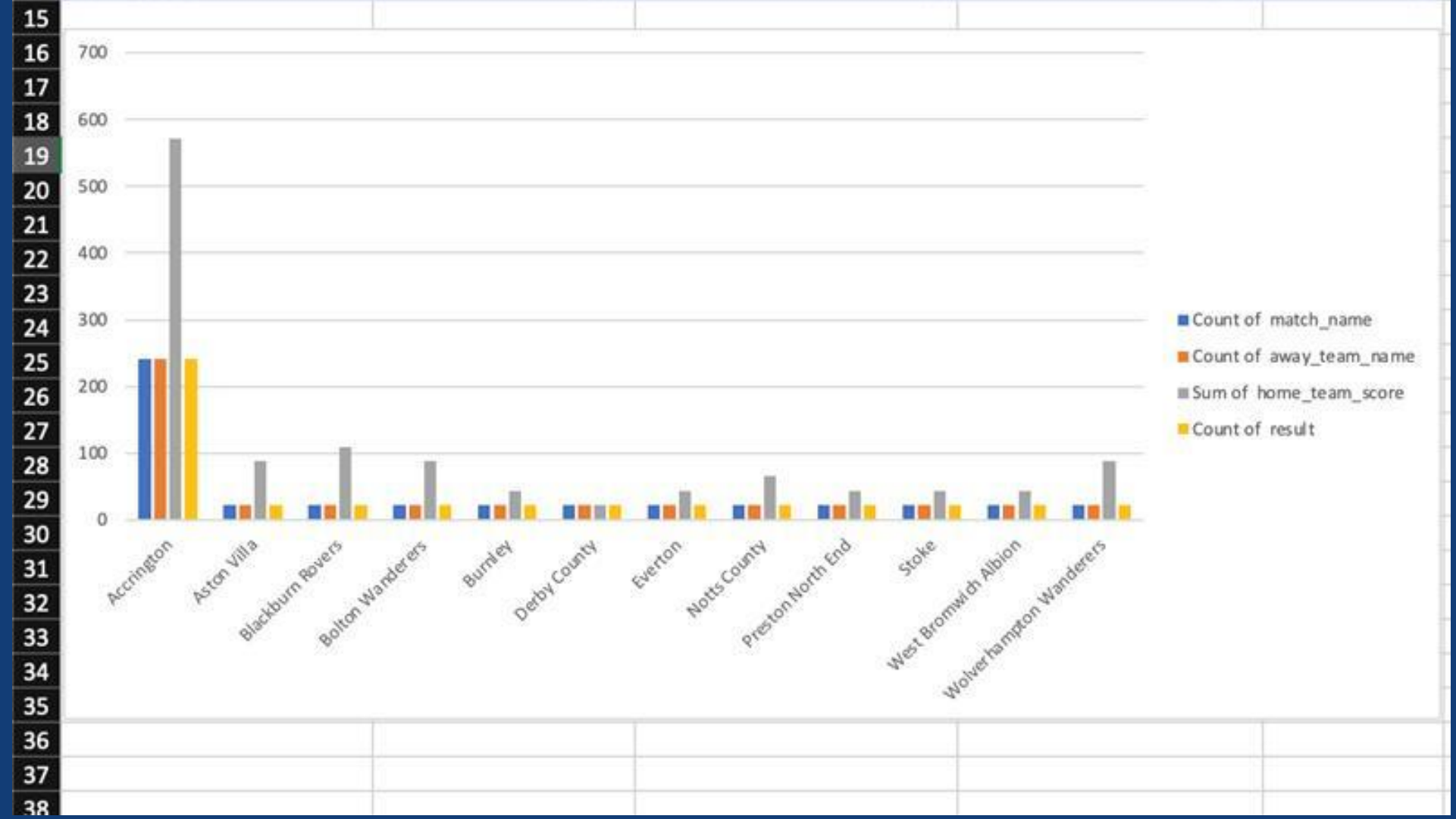
Insight-2

Query 2: Retrieve the total number of wins, losses, and draws for all the teams and order it by the highest team wins.

We discovered that the team Liverpool had the most wins and the team Middlesbrough Ironopolis had the least.


```
129
130    /* Query 2: Retrieve the total number of wins, losses, and draws for all the teams and order it by the highest team w
131  • SELECT ` team_name`, SUM(` wins`) as 'team_wins', SUM(` losses`) as 'team_losses', SUM(draws) as 'team_draws'
132    FROM Standings
133    GROUP BY ` team_name` ORDER BY team_wins desc;
00%    ◆ 48:133
```

Result Grid | Filter Rows: Search | Export:

team_name	team_wins	team_losses	team_draws
Liverpool	2259	1284	1133
Manchester United	2132	1180	1080
Manchester City	2027	1563	1110
Wolverhampton Wanderers	2025	1791	1190
Sheffield United	1985	1730	1221
Preston North End	1976	1812	1310
Aston Villa	1971	1703	1162
Everton	1955	1641	1204
Sunderland	1932	1731	1209
Derby County	1928	1843	1221
Burnley	1919	1865	1234
Blackburn Rovers	1914	1791	1243
Newcastle United	1913	1696	1107
West Bromwich Albion	1890	1829	1237
Bolton Wanderers	1889	1874	1207
Arsenal	1844	1101	1003
Nottingham Forest	1832	1799	1277

Result 25
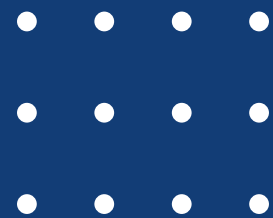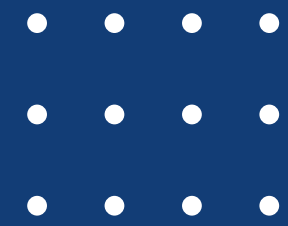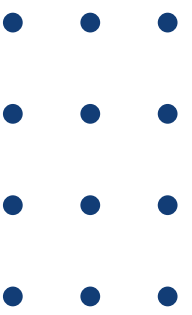
SQL Used

```
SELECT ` team_name`, SUM(`
wins`) as 'team_wins', SUM(`
losses`) as 'team_losses',
SUM(draws) as 'team_draws'
 FROM Standings
 GROUP BY ` team_name`
ORDER BY team_wins desc;
```
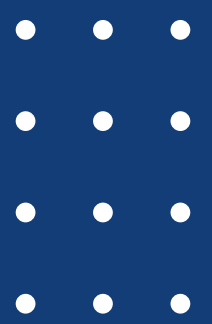
VISUALIZATION

Highest Wins by Team

team name (Standings.csv)
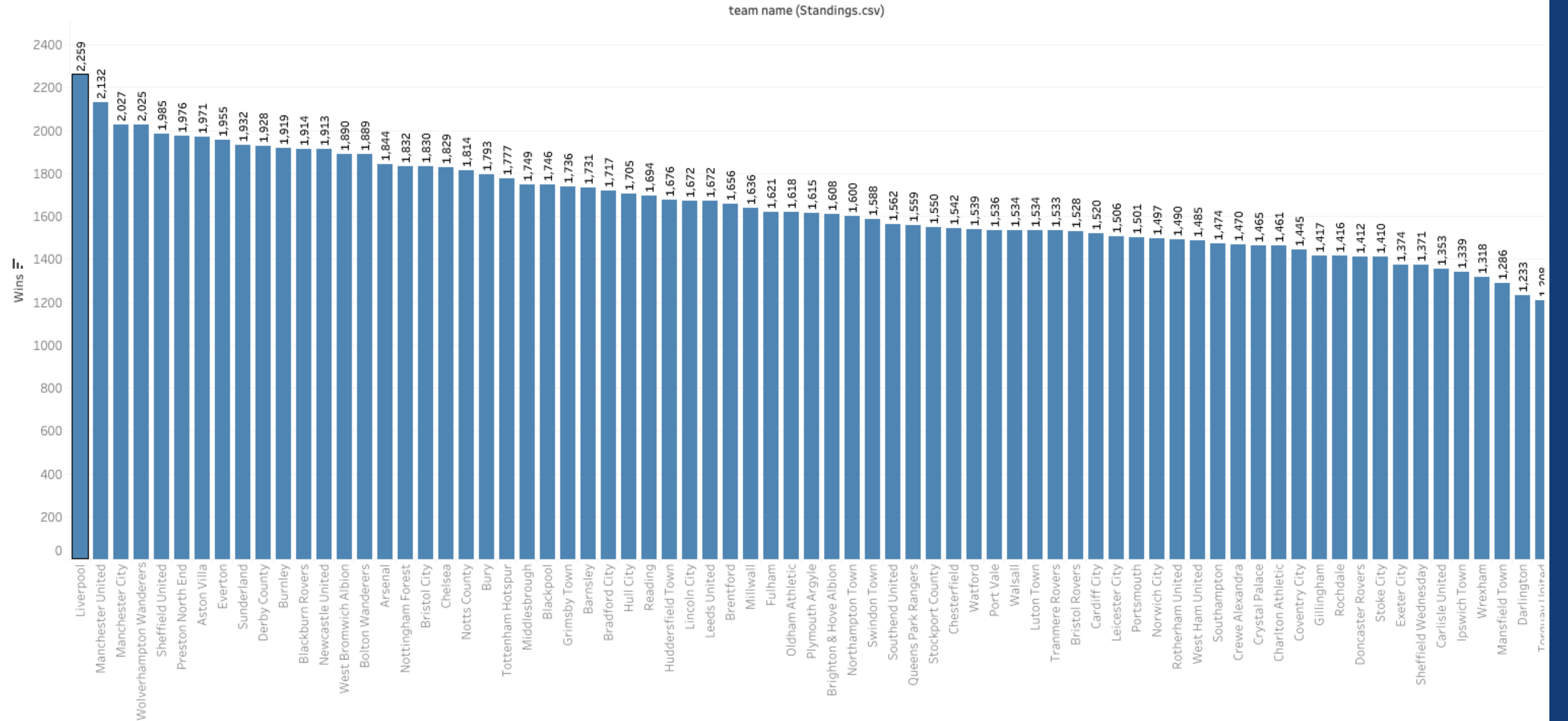
Insight-3

Query 3: Retrieve a list of all team who have made at least 20 appearances in the dataset, ordered by the total number of appearances.

We can see that the team Preston North End had the most appearences out of any other team with a total of 5,098.
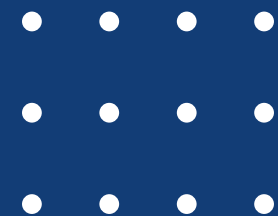
```
134
135 ❌    /* Query 3: Retrieve a list of all team who have made at least 20 appearances in the dataset, ordered by the total num
136       SELECT team_name, COUNT(*) AS total_appearances
137       FROM appearances
138       GROUP BY team_name
139       HAVING COUNT(*) >= 20
140       ORDER BY total_appearances DESC;
141
```

100%   147:135   1 error found

Result Grid   Filter Rows: 🔍 Search   Export:

team_name	total_appearanc...	
▶ Preston North End	5098	
Burnley	5018	
Wolverhampton Wanderers	5006	
Derby County	4992	
Notts County	4986	
Bolton Wanderers	4970	
West Bromwich Albion	4956	
Blackburn Rovers	4948	
Sheffield United	4936	
Nottingham Forest	4908	
Barnsley	4876	
Sunderland	4872	
Bury	4852	
Aston Villa	4836	
Blackpool	4829	
Everton	4800	
Bristol City	4752	

Result 28   Read Only

Action Output

	Time	Action	Response
		SELECT team_name, COUNT(wins) as team_wins , SUM(losses) as team...	165 row(s) returned
✅ 56	17:07:29	SELECT team_name, COUNT(*) AS total_appearances FROM appearances GR...	165 row(s) returned

SQL Used

SELECT team_name, COUNT(*)
AS total_appearances
 FROM appearances
 GROUP BY team_name
 HAVING COUNT(*) >= 20
 ORDER BY total_appearances
DESC;

VISUALIZATION

Highest Appearences by Teams

Team Name	Appearances
Preston North End	5,098
Burnley	5,018
Wolverhampton Wandere..	5,006
Derby County	4,992
Notts County	4,986
Bolton Wanderers	4,970
West Bromwich Albion	4,956
Blackburn Rovers	4,948
Sheffield United	4,936
Nottingham Forest	4,908
Barnsley	4,876
Sunderland	4,872
Bury	4,852
Aston Villa	4,836
Blackpool	4,829
Everton	4,800
Bristol City	4,752
Bradford City	4,733
Newcastle United	4,716
Manchester City	4,700
Grimsby Town	4,679
Liverpool	4,676
Middlesbrough	4,638
Lincoln City	4,597
Hull City	4,573
Oldham Athletic	4,545
Walsall	4,413
Manchester United	4,392
Huddersfield Town	4,384
Fulham	4,372
Stockport County	4,324
Crewe Alexandra	4,316
Chelsea	4,298

Insight-4

Query 4: Query to retrieve the top 20 highest-scoring matches in the Matches dataset, ordered by total goals scored.

We can see that the most goals scored in any match was 17.

SQL Used

```
SELECT `match_id`,`
home_team_id`,`
away_team_id`,`
home_team_score`,`
away_team_score`,`
home_team_score`+`
away_team_score` AS
total_goals
FROM matches
ORDER BY total_goals DESC
LIMIT 20;
```

VISUALIZATION

Highest Total Goals in a Match
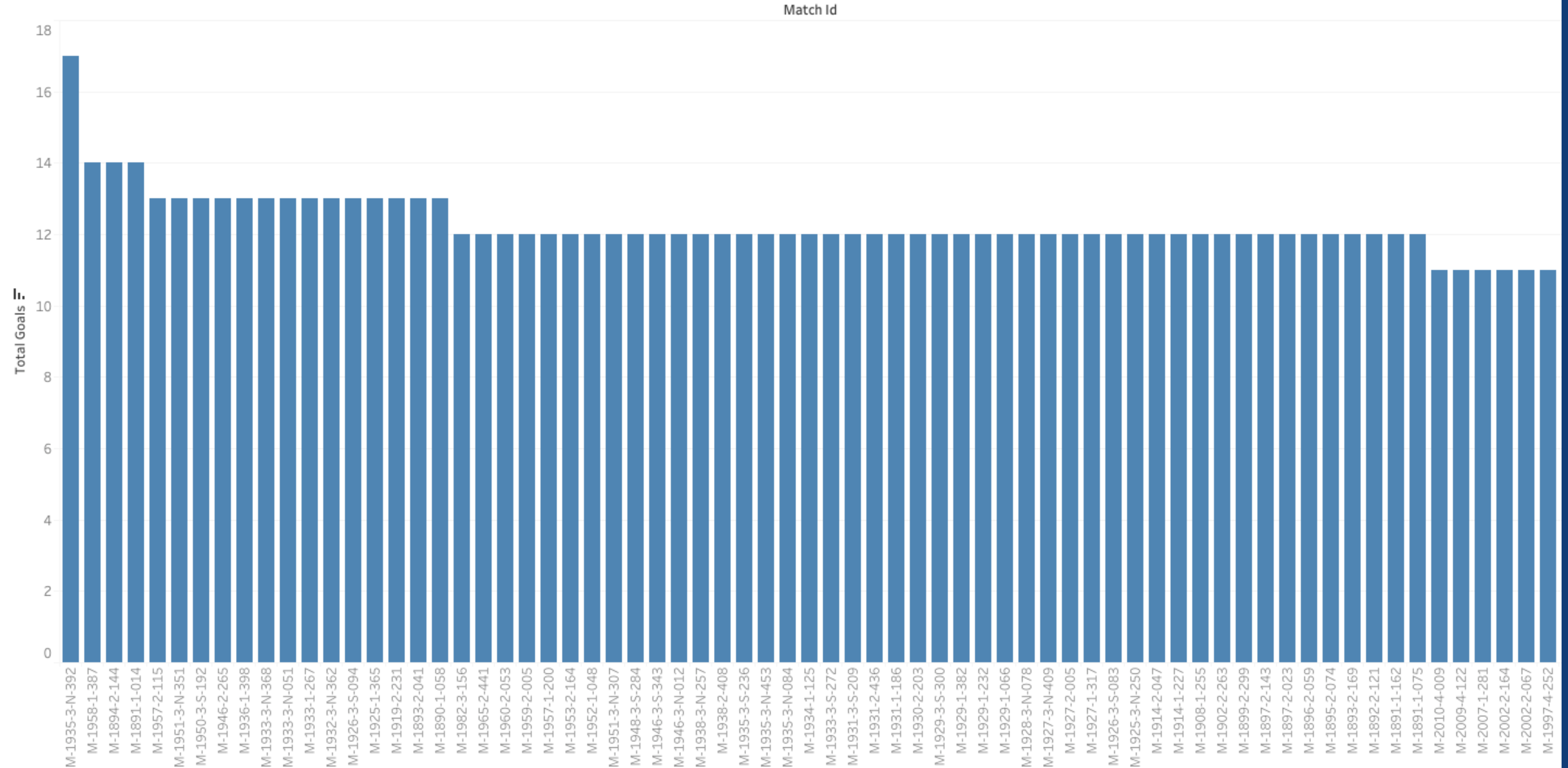
Insight-5

Query 5: Retrieve a list of all teams that have ever participated in the Premier League, along with the years they competed and their final standings for each season.

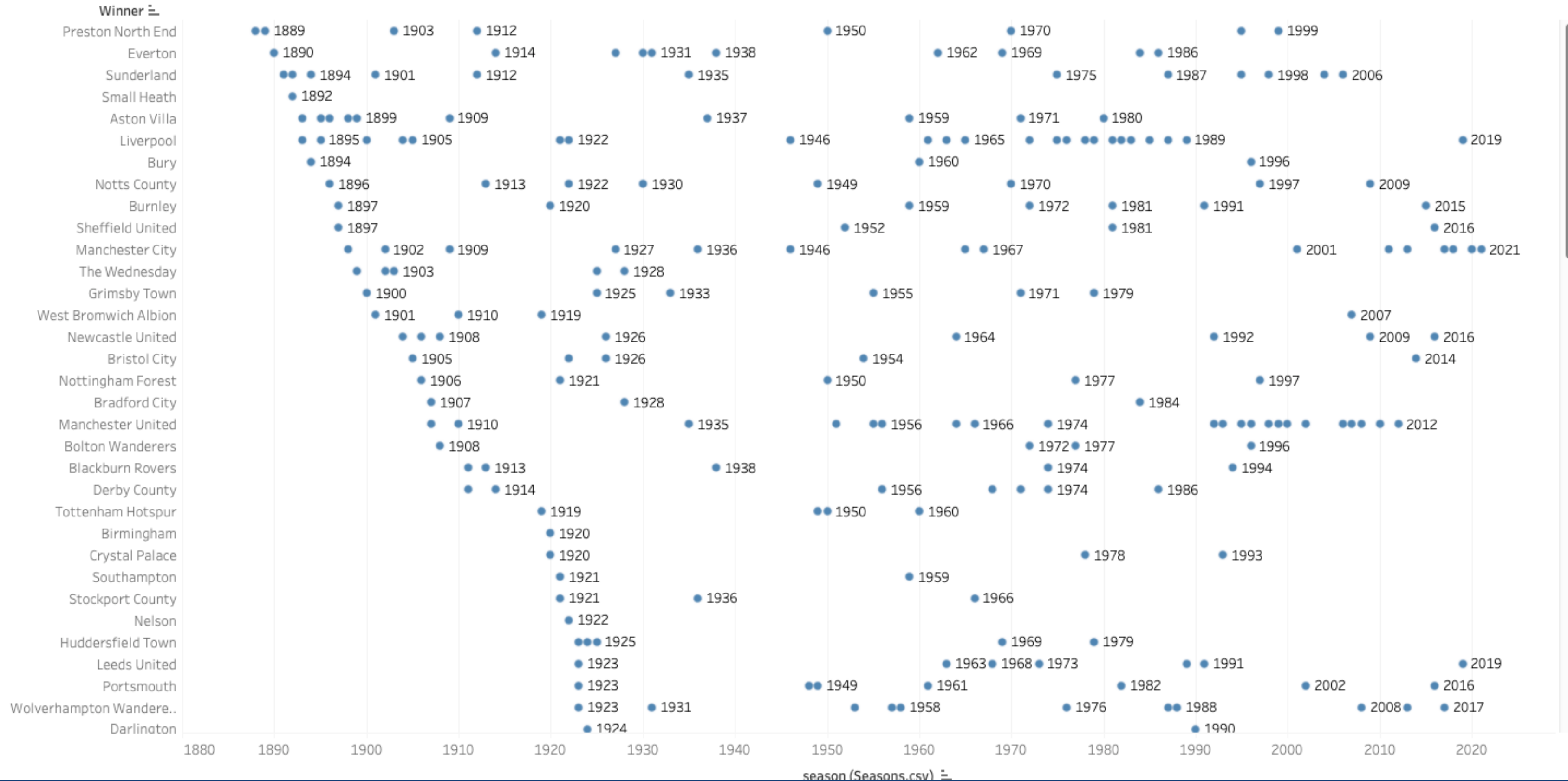We found that all teams have played multiple matches every season.

SQL Used

SELECT ` team_name`, SUM(`wins`) as 'team_wins', SUM(`losses`) as 'team_losses', SUM(draws) as 'team_draws'
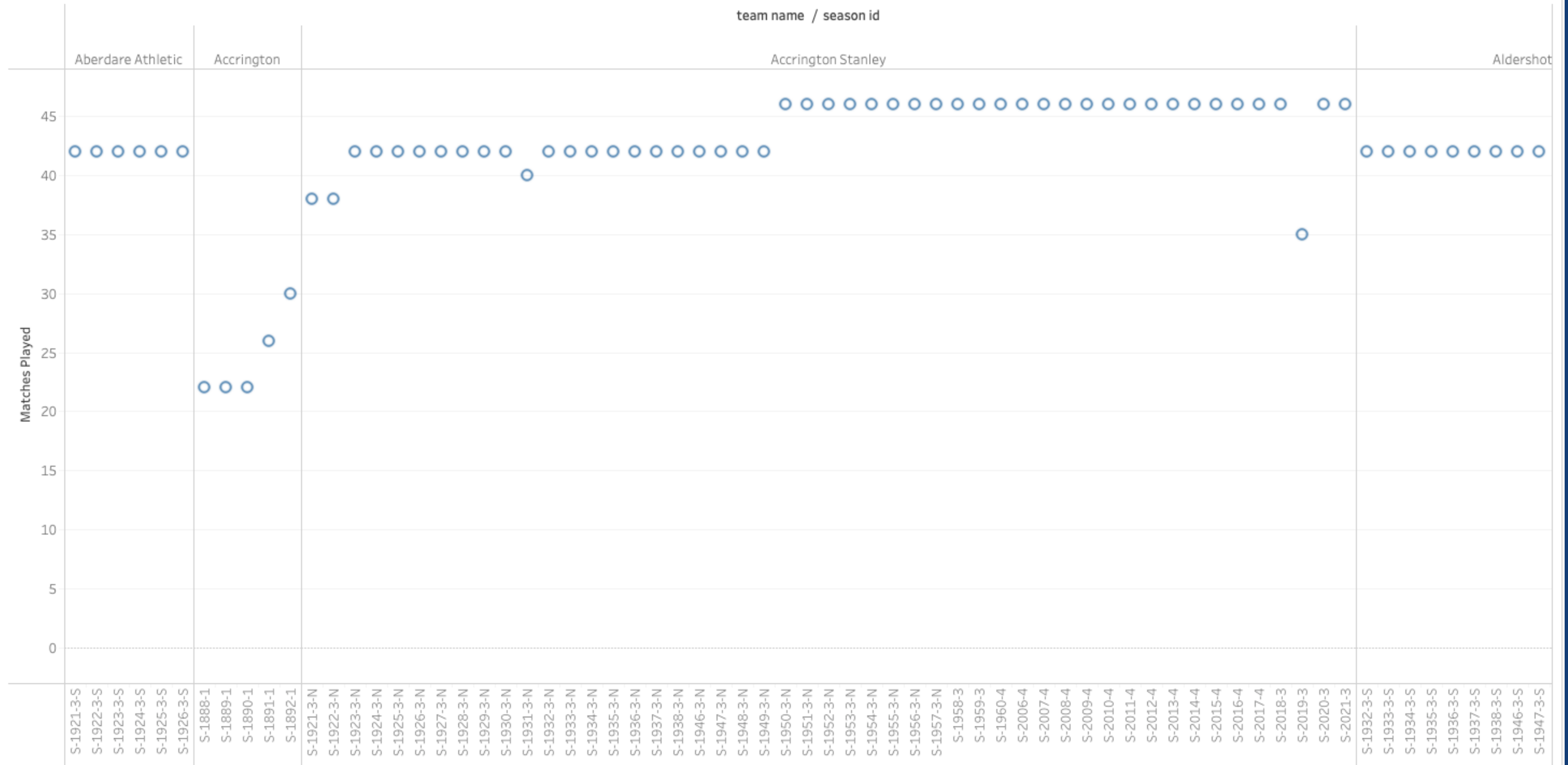 FROM Standings
 GROUP BY ` team_name`
ORDER BY team_wins desc;

VISUALIZATION PT.1

Seaons Won By Teams

DATA SOURCE:

The Fjelstul English Football Database
https://www.kaggle.com/datasets/sujaykapadnis/english-football

THANK YOU