

Q1. List the first name and last name of all players who have ever played in the league, and their current club if applicable. List the players in ascending alphabetical order, primarily on last name and secondarily on first name.

```
SELECT p.FirstName, p.LastName, c.ClubName FROM player AS p
LEFT JOIN clubplayer AS cp ON cp.PlayerID = p.PlayerID
LEFT JOIN club AS c ON c.ClubID = cp.ClubID
WHERE FromDate IN (SELECT MAX(FromDate) FROM clubplayer GROUP BY PlayerID)
HAVING COUNT(PlayerID) >=1 AND ToDate IS NULL)
ORDER BY p.LastName, p.FirstName;
```

	FirstName	LastName	ClubName
▶	Katrina	Adams	Moorabbin Rugby
	Francesca	Angelou	Melbourne City
	Kristina	Applegate	Powerhouse Rugby
	Diane	Arbus	Melbourne City
	Stella	Artois	Moorabbin Rugby
	Silvio	Auric	Footscray Rugby Club
	Eric	Bana	Moorabbin Rugby
	Bruce	Banner	Melbourne University Rugby Club
	Rhonda	Bassett	Moorabbin Rugby
	Arnold	Bax	Powerhouse Rugby

143 rows returned

Q2. List the full name (presented as a single string) of female players who have played for more than one team.

```
SELECT CONCAT(p.FirstName, ' ', p.LastName) AS result FROM player AS p
```

```
NATURAL JOIN playerteam AS pt
```

```
WHERE p.Sex = 'F'
```

```
GROUP BY p.FirstName, p.LastName
```

```
HAVING COUNT(DISTINCT pt.TeamID) > 1;
```

	result
▶	Barbara Standwick
	Beatrix Potter
	Bella LaStrange
	Bernyce Findlay
	Betty Davis
	Bo Peep
	Bridget Jones
	Brittany Beerstein
	Cinda Rella
	Daphne Chloes

59 rows returned

Q3. List the full name (presented as a single string) of players who have never played in a 'mixed' competition.

```
SELECT CONCAT(FirstName, ' ', Lastname) AS fullname FROM player
```

```
WHERE PlayerID NOT IN
```

```
(SELECT PlayerID FROM player
```

```
NATURAL JOIN playerteam
```

```
NATURAL JOIN team
```

```
WHERE TeamType = 'Mixed 6-a-side');
```

	fullname
▶	Dave Ganey
	Mia Farrow
	Don Dunstan
	Doug Liman
	Melanie Griffith
	Michelle Pfeiffer
	Damian Elsevier
	Randall Thompson
	Michael Mouse
	Melinda Gates

15 rows returned

Q4. List the season year(s) with the highest number of cancelled games.

```
SELECT SeasonYear, COUNT(*) AS num_of_cancel FROM season  
NATURAL JOIN game  
WHERE T1Score IS NULL AND T2Score IS NULL  
GROUP BY SeasonYear;
```

	SeasonYear	num_of_cancel
▶	2017	1
	2018	1

2 rows returned

Q5. List the name of the clubs where the number of male members is not the same as the number of female members. For these clubs, present the number of male and female players, and the absolute difference between the number of males and females in the club. Order the results by the absolute difference between males and females in the club, with the club having the highest difference listed first.

```
SELECT c.ClubName, SUM(Sex = 'M') AS men, SUM(Sex = 'F') AS women, ABS(SUM(Sex = 'M') -  
Sum(Sex = 'F')) AS difference FROM player
```

```
NATURAL JOIN clubplayer AS cp
```

```
NATURAL JOIN club AS c
```

```
WHERE cp.ToDate IS NULL
```

```
GROUP BY ClubID
```

```
HAVING difference > 0
```

```
ORDER BY difference DESC;
```

	clubname	men	women	difference
►	Melbourne City	11	9	2
	Moorabbin Rugby	8	9	1
	Animatus Rugby Club	9	8	1
	Melbourne University Rugby Club	8	9	1

4 rows returned

Q6. List the first name, sex, and number of games played in 2018 and 2017 of players who played more games in 2017 than in 2018. There might be players that didn't play in 2018 but did in 2017. You should take these cases in account as well.

```
SELECT p.FirstName, p.Sex, (SUM(g.SeasonID = '1') + SUM(g.SeasonID = '2') + SUM(g.SeasonID = '3'))
AS num_of_games_in_2017,
(SUM(g.SeasonID = '4') + SUM(g.SeasonID = '5') + SUM(g.SeasonID = '6')) AS num_of_games_in_2018
FROM player AS p
LEFT JOIN playerteam AS pt ON pt.PlayerID = p.PlayerID
LEFT JOIN game AS g ON g.GameID = pt.GameID
GROUP BY p.PlayerID
HAVING num_of_games_in_2017 > num_of_games_in_2018;
```

	FirstName	Sex	num_of_games_in_2017	num_of_games_in_2018
►	Barbara	F	6	5
	Kate	F	5	4
	Mia	F	5	4
	Fiona	F	9	8
	Rosalyn	F	8	7
	Donna	F	10	9
	Betty	F	7	6
	Karin	F	5	4
	Miranda	F	6	5
	Frida	F	8	7

50 rows returned

Q7. List the name of all teams that scored more than 100 points in the Bingham Trophy in 2017, along with the total points they scored. Order the result according to the points the team scored, highest scoring team first.

```
SELECT TeamName, c.team, SUM(c.score) AS fullscore FROM
```

```
(SELECT Team1 team, SUM(T1Score) score FROM game WHERE SeasonID = '3' GROUP BY Team1
```

```
UNION ALL
```

```
SELECT Team2 team, SUM(T2Score) score FROM game WHERE SeasonID = '3' GROUP BY Team2)  
c,team
```

```
WHERE team.TeamID = c.team
```

```
GROUP BY c.team, TeamName
```

```
HAVING SUM(c.score) > 100
```

```
ORDER BY SUM(c.score) DESC;
```

	TeamName	team	fullscore
►	Melbourne City Mixed	20	129
	Monash Uni Mixed	19	119
	Powerhouse mixed	17	117
	Animatus Mixed	24	111
	Melbourne Uni Mixed	18	104

5 rows returned

Q8. For the player who has spent the fewest number of days as a member of 'Melbourne City' club as of April 30th 2020, give the full name (presented as a single string) and the total number of days spent as a member. Only consider players who have been a member of the club at some point (i.e. do not include players who have never been signed up with Melbourne City). Assume there are no joint shortest serving players.

```
SELECT CONCAT(p.FirstName, ' ', p.LastName) AS fullname, DATEDIFF(ToDate, FromDate) AS  
difference FROM clubplayer AS cp
```

```
LEFT JOIN club AS c ON c.ClubID = cp.ClubID
```

```
LEFT JOIN player AS p ON p.PlayerID = cp.PlayerID
```

```
WHERE c.ClubName = 'Melbourne City'
```

```
HAVING difference IS NOT NULL;
```

	fullname	difference
▶	Karin Carpenter	32

1 row returned

Q9. A 'foreign game' is when a player has played a game in a team which was not part of the club they were a member of at the time. Find the first and last names and the number of 'foreign games' played for the 20 players who have played the most 'foreign games'. List them from highest number of foreign games to lowest.

```
SELECT p.FirstName, p.LastName, COUNT(*) AS num_of_foreign_game FROM team AS t
LEFT JOIN playerteam AS pt ON pt.TeamID = t.TeamID
LEFT JOIN clubplayer AS cp ON cp.PlayerID = pt.PlayerID
LEFT JOIN player AS p ON p.PlayerID = pt.PlayerID
WHERE t.ClubID != cp.ClubID
GROUP BY p.FirstName, p.LastName
HAVING COUNT(*) > 0
ORDER BY num_of_foreign_game DESC
LIMIT 20;
```

	FirstName	LastName	num_of_foreign_game
►	Arthur	Dayley	32
	Diana	Rigg	21
	Donna	Reed	19
	Florence	Henderson	19
	Brock	Briers	18
	Broderick	Davis	18
	Bruce	Banner	18
	Karin	Carpenter	18
	Bevan	Jackson	18
	Alex	Skaarsgard	18

20 rows returned

Q10. Return the team name, the highest number of walkovers (forfeits) the team has ever given away in a season, and the season year(s) during which this occurred for teams who have given away 2 or more walkovers in the same season. Assume that any game with one team scoring 28 and the other scoring 0 implies that the game was a walkover.

```
SELECT SeasonYear, TeamName, SUM(num_game) AS num_of_walkover FROM (  
SELECT s.SeasonYear, t.TeamName, COUNT(*) AS num_game FROM game  
LEFT JOIN season AS s ON s.SeasonID = game.SeasonID  
LEFT JOIN team AS t ON t.TeamID = game.Team1  
WHERE T1Score = '0' AND T2Score = '28'  
GROUP BY s.SeasonID, t.TeamName  
UNION ALL  
SELECT s.SeasonYear, t.TeamName, COUNT(*) AS num_game FROM game  
LEFT JOIN season AS s ON s.SeasonID = game.SeasonID  
LEFT JOIN team AS t ON t.TeamID = game.Team2  
WHERE T1Score = '28' AND T2Score = '0'  
GROUP BY s.SeasonID, TeamName)a  
GROUP BY SeasonYear, TeamName  
HAVING num_of_walkover >= 2  
ORDER BY num_of_walkover DESC;
```

	SeasonYear	TeamName	num_of_walkover
▶	2017	Footscray Mixed	3
	2017	Powerhouse Men	2
	2018	Powerhouse Men	2

4 rows returned