

**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 firstname, lastname, clubname
```

```
FROM (
```

```
SELECT DISTINCT firstname, lastname ,
```

```
    CASE WHEN todote IS NULL THEN clubname
```

```
    ELSE NULL
```

```
    END AS clubname
```

```
FROM player natural join team natural join game natural join playerteam natural join club join clubplayer
```

```
WHERE t2score IS NOT NULL OR t1score IS NOT NULL
```

```
ORDER BY lastname, firstname) AS teams
```

```
WHERE clubname IS NOT NULL;
```

	firstname	lastname	clubname
▶	Katrina	Adams	Moorabbin Rugby
	Francesca	Angelou	Melbourne University Rugby Club
	Adam	Ant	Moorabbin Rugby
	Kristina	Applegate	Monash University Rugby Club
	Diane	Arbus	Melbourne University Rugby Club
	Stella	Artois	Moorabbin Rugby
	Silvio	Auric	Melbourne City
	Eric	Bana	Moorabbin Rugby
	Bruce	Banner	Powerhouse Rugby
	Rhonda	Bassett	Moorabbin Rugby

150 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(FirstName, ' ', LastName) AS FullName
```

```
FROM player NATURAL JOIN playerteam
```

```
WHERE Sex = 'F'
```

```
Group BY playerid
```

```
HAVING COUNT(distinct TeamID) > 1
```

	FullName
▶	Sally Davis
	Tiffany Lightshade
	Barbara Standwick
	Kate Hudson
	Fiona Bruce
	Rosalyn McQuarrie
	Donna Reed
	Susanne Hoffs
	Tabitha Stephens
	Betty Davis

59 rows returned

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

```
SELECT DISTINCT(CONCAT(firstname, ' ', lastname)) AS fullName
```

```
FROM player
```

```
WHERE playerID NOT IN (
```

```
SELECT Distinct playerID
```

```
FROM player NATURAL JOIN playerteam NATURAL JOIN game NATURAL JOIN season NATURAL JOIN  
competition
```

```
WHERE CompetitionID = 3);
```

	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, MAX(CancelledGames) AS MAXCancelled
```

```
FROM (
```

```
SELECT seasonyear, COUNT(*) AS CancelledGames
```

```
FROM game NATURAL JOIN season
```

```
WHERE game.seasonID = season.seasonID AND t1score IS NULL
```

```
GROUP BY seasonyear) AS CancelledGameTable
```

```
GROUP BY seasonyear
```

	seasonyear	MAXCancelled
▶	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 clubname, SUM(sex = 'M') as Male, SUM(sex = 'F') as Female, ABS(SUM(sex = 'F') - SUM(sex = 'M')) AS AbsoluteDifference
```

```
FROM player NATURAL JOIN clubplayer natural join club
```

```
WHERE todote is NULL
```

```
GROUP BY clubname
```

```
HAVING ABS(SUM(sex = 'F') - SUM(sex = 'M')) != 0
```

```
ORDER BY AbsoluteDifference DESC;
```

	clubname	Male	Female	AbsoluteDifference
►	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 firstname, sex , SUM(game.seasonid in (1,2,3)) AS '2017', SUM(game.seasonid in (4,5,6)) AS '2018'
```

```
FROM player natural join game natural join season natural join playerteam
```

```
GROUP BY playerID, sex
```

```
HAVING (SUM(game.seasonid in (1,2,3)) - SUM(game.seasonid in (4,5,6))) > 0
```

	firstname	sex	2017	2018
►	Garret	M	8	5
	Darren	M	1	0
	Bernyce	F	8	7
	Florence	F	10	9
	Ruth	F	9	8
	Diana	F	11	10
	Barbara	F	6	5
	Kate	F	5	4
	Mia	F	5	4
	Fiona	F	9	8

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, seasonyear,  
SUM(CASE WHEN teamid = team1 THEN t1score  
      WHEN teamid = team2 THEN t2score  
      ELSE 0  
      END) AS scores  
FROM game natural join team natural join season  
WHERE CompetitionID = 3  
GROUP BY teamname , seasonyear  
HAVING scores > 100 AND seasonyear = 2017  
ORDER BY scores DESC
```

	teamname	seasonyear	scores
►	Melbourne City Mixed	2017	129
	Monash Uni Mixed	2017	119
	Powerhouse mixed	2017	117
	Animatus Mixed	2017	111
	Melbourne Uni Mixed	2017	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(firstname, ' ', lastname) as FullName,  
        CASE WHEN todate IS NULL THEN datediff('2020/04/30', fromdate)  
              ELSE datediff(todate, fromdate)  
        END AS NumberOfDays  
FROM clubplayer natural join player  
WHERE clubID = 2  
ORDER BY NumberOfDays  
LIMIT 1;
```

	FullName	NumberOfDays
▶	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 firstname, lastname , COUNT(*) AS Games
FROM player INNER JOIN playerteam on player.PlayerID=playerteam.PlayerID
      INNER JOIN game on playerteam.GameID=game.GameID
      INNER JOIN team on playerteam.TeamID=team.TeamID
      INNER JOIN clubplayer on player.PlayerID=clubplayer.PlayerID
WHERE player.playerid = playerteam.playerid AND team.ClubID !=clubplayer.ClubID AND
      CASE WHEN toDate is NULL THEN MatchDate BETWEEN FromDate and '2020-04-30'
      ELSE MatchDate BETWEEN FromDate AND toDate
END
GROUP BY firstname, lastname
ORDER BY Games DESC
LIMIT 20;
```

	firstname	lastname	Games
▶	Diana	Rigg	21
	Donna	Reed	19
	Florence	Henderson	19
	Bevan	Jackson	18
	Broderick	Davis	18
	Bruce	Banner	18
	Brock	Briers	18
	Alex	Skaarsgard	18
	Brian	Blessed	18
	Fiona	Bruce	17

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 teamname,  
       SUM(CASE WHEN teamid = team1 THEN 1  
              WHEN teamid = team2 THEN 1  
              ELSE 0  
            END) AS walkovers, seasonyear  
FROM game NATURAL JOIN team NATURAL JOIN season  
WHERE (t1score = 0 AND t2score = 28) OR (t1score = 28 AND t2score = 0)  
GROUP BY seasonyear, teamname  
HAVING walkovers >= 2
```

	teamname	walkovers	seasonyear
▶	Powerhouse Men	2	2017
	Powerhouse Men	2	2018
	Footscray Mixed	3	2017

3 rows returned