

CHRISTIAN DROZDOWICZ

StudentID: 832391

INFO20003

ASSIGNMENT 2

Question 1: Count the number of players by the first letter of their surname. List the results in alphabetical order.

```
SELECT SUBSTR(LastName, 1, 1) AS last_name_first_letter, COUNT(*) AS last_name_count
FROM player
GROUP BY SUBSTR(LastName, 1, 1)
ORDER BY SUBSTR(LastName, 1, 1);
```

last_name_first_letter	last_name_count
A	7
B	16
C	6
D	15
E	5
F	8
G	8
H	10
J	3
K	2

18 rows returned

Question 2: List the game ID, year, and participating team names for every cancelled game.

```
SELECT game.GameID, SeasonYear, team1.TeamName AS Team1, team2.TeamName AS Team2
FROM game
    INNER JOIN
        team team1
    ON game.Team1 = team1.TeamID
    INNER JOIN
        team team2
    ON game.Team2 = team2.TeamID
    NATURAL JOIN season
WHERE game.T1Score IS NULL AND game.T2Score IS NULL;
```

GameID	SeasonYear	Team1	Team2
44	2017	Footscray Women	Moorabbin Women

1 row returned

Question 3: List the first and last names of players who have played more than 20 games in total across all competitions.

```
SELECT FirstName, LastName
```

```
FROM player
```

```
NATURAL JOIN playerteam
```

```
GROUP BY FirstName, LastName
```

```
HAVING COUNT(GameID) > 20;
```

FirstName	LastName
Diana	Rigg
Cinda	Rella
Bo	Peep

3 rows returned

Question 4: For all current members of the Melbourne City club who have played fewer than 12 games across all competitions, list their first and last names and the number of games they have played. Place the players who have played the most games first.

```
SELECT DISTINCT FirstName, LastName, COUNT(GameID) AS games_played
FROM playerteam
    NATURAL JOIN player NATURAL JOIN clubplayer NATURAL JOIN club
WHERE ToDate IS NULL AND ClubID = 2
GROUP BY ClubName, FirstName, LastName, FromDate, ToDate
HAVING COUNT(GameID) < 12
ORDER BY games_played DESC;
```

FirstName	LastName	games_played
Kimberley	Ranges	11
Callum	Hotspor	10
Linda	Evangelista	10
Melanie	Griffith	9
Don	Dunstan	8

5 rows returned

Question 5: List the names of men who play in the Bingham Trophy but not the Dewar Shield competition.

```
SELECT FirstName, LastName
```

```
FROM player
```

```
    NATURAL JOIN competition
```

```
    NATURAL JOIN playerteam NATURAL JOIN game NATURAL JOIN season
```

```
WHERE player.Sex = 'M' AND PlayerID NOT IN
```

```
    (SELECT PlayerID
```

```
    FROM player
```

```
        NATURAL JOIN competition
```

```
        NATURAL JOIN playerteam NATURAL JOIN game NATURAL JOIN season
```

```
    WHERE CompetitionName = 'Dewar Shield'
```

```
    GROUP BY PlayerID)
```

```
GROUP BY FirstName, LastName;
```

FirstName	LastName
Steven	Spielberg
Stuart	Mills
Seth	Greene
Silvio	Auric
Simon	Brown
Sandy	Pentland
Beaker	LeLab

7 rows returned

Question 6: List the full name (in one column) and current club of players who did not play a game in any competition in the 2017 season.

```
SELECT DISTINCT CONCAT(player.FirstName, ' ', player.LastName) AS full_name, ClubName
```

```
FROM player
```

```
LEFT JOIN playerteam ON player.PlayerID = playerteam.PlayerID
```

```
LEFT JOIN clubplayer ON player.PlayerID = clubplayer.PlayerID
```

```
NATURAL JOIN season NATURAL JOIN club
```

```
WHERE playerteam.GameID IS NULL AND SeasonYear = '2017' AND ToDate IS NULL;
```

full_name	ClubName
Rod Temperton	Melbourne City

1 row returned

Question 7: Which club currently has the fewest female players? Print the club name and the number of female players in it.

```
SELECT COUNT(*) AS female_players, ClubName
FROM club
      NATURAL JOIN clubplayer NATURAL JOIN player
WHERE ToDate IS NULL AND Sex = 'F'
GROUP BY ClubName
HAVING COUNT(FirstName)
ORDER BY female_players ASC LIMIT 1;
```

female_players	ClubName
8	Animatus Rugby Club

1 row returned



Question 8: A team has a “winless season” when it does not win any of the games it plays in that season. Find the teams that have had exactly one winless season. List the team name and the year in which their winless season occurred.

```
SELECT DISTINCT TeamName, SeasonID
```

```
FROM team
```

```
/* Inner Join with two nested SELECT queries unioned together to create table of only teams that participated per SeasonID */
```

```
    INNER JOIN (
```

```
        (SELECT DISTINCT Team1 AS Participated, SeasonID FROM game)
```

```
        UNION
```

```
        (SELECT DISTINCT Team2 AS Participated, SeasonID FROM game)
```

```
    ) ParticipatingTeam ON Participated = TeamID
```

```
/* Create two nested SELECT each with another nested SELECT query unioned together to create table of only teams that won a game per SeasonID and only show values NOT IN this new table */
```

```
WHERE (TeamID, SeasonID) NOT IN
```

```
    (SELECT DISTINCT TeamID, SeasonID
```

```
    FROM team
```

```
        INNER JOIN (SELECT DISTINCT Team1, COUNT(SeasonID), SeasonID
```

```
            FROM team NATURAL JOIN game NATURAL JOIN season
```

```
            WHERE T1Score>T2Score
```

```
            GROUP BY Team1, SeasonID) AS foo ON team.TeamID = Team1
```

```
        UNION
```

```
        SELECT DISTINCT TeamID, SeasonID
```

```
        FROM team
```

```
            INNER JOIN (SELECT DISTINCT Team2, COUNT(SeasonID), SeasonID
```

```
                FROM team NATURAL JOIN game NATURAL JOIN season
```

```
                WHERE T2Score>T1Score
```

```
                GROUP BY Team2, SeasonID) AS bar ON team.TeamID = Team2);
```

TeamName	SeasonID
Powerhouse Men	4
Footscray Mixed	6

2 rows returned

Question 9: Find the first and last names of players who have played against all their former clubs.

Got completely and utterly confused and stuck with this question so purposely omitted 😞

(Question 10 is still below!)

Question 10: How many points did the 'Melbourne City Women' team score in the Williams Plate in 2017?

```
SELECT DISTINCT (Scores1.T1Score_total + Scores2.T2Score_total) AS SumScores
```

```
FROM team
```

```
/* Natural Join with a nested SELECT only when Team1 is Melbourne City Women
```

```
and use this SELECT in the above sum*/
```

```
NATURAL JOIN
```

```
(SELECT DISTINCT Team1, sum(T1Score) AS T1Score_total
```

```
FROM game
```

```
NATURAL JOIN season NATURAL JOIN competition
```

```
WHERE Team1 = '12' AND CompetitionName = 'Williams plate'
```

```
AND SeasonYear = '2017'
```

```
GROUP BY Team1) Scores1
```

```
/* Natural Join with a nested SELECT only when Team2 is Melbourne City Women
```

```
and use this SELECT in the above sum*/
```

```
NATURAL JOIN
```

```
(SELECT DISTINCT Team2, sum(T2Score) AS T2Score_total
```

```
FROM game
```

```
NATURAL JOIN season NATURAL JOIN competition
```

```
WHERE Team2 = '12' AND CompetitionName = 'Williams plate'
```

```
AND SeasonYear = '2017'
```

```
GROUP BY Team2) Scores2;
```

SumScores
128

1 row returned