PHASE 4

--Yisa Wu--

**--Query 1: Find all matches in a specific city with seating capacity greater than 25,000.**
**--analysis: This query helps managers identify matches held in cities with large stadiums, enabling them to plan and allocate resources effectively for high-capacity venues. According to the results, Stadio Olimpico Grande Torino and Stade de la Meinau have capacities greater than 25000.**

```
SELECT m.match_id, m.match_date, t.team_name, s.stadium_name, s.seating_capacity
FROM match m
JOIN round r ON m.round_id = r.round_id
JOIN fixture_city fc ON r.fixture_id = fc.fixture_id
JOIN city c ON fc.city_id = c.city_id
JOIN stadium s ON c.city_id = s.city_id
JOIN schedule sch ON m.match_id = sch.match_id
JOIN team t ON sch.team_id = t.team_id
WHERE s.seating_capacity > 25000;
```

```
533   --1--
534
535   SELECT m.match_id, m.match_date, t.team_name, s.stadium_name, s.seating_capacity
536   FROM match m
537   JOIN round r ON m.round_id = r.round_id
538   JOIN fixture_city fc ON r.fixture_id = fc.fixture_id
539   JOIN city c ON fc.city_id = c.city_id
540   JOIN stadium s ON c.city_id = s.city_id
541   JOIN schedule sch ON m.match_id = sch.match_id
542   JOIN team t ON sch.team_id = t.team_id
543   WHERE s.seating_capacity > 25000;
544
```

Results Messages

| | match_id | match_date | team_name | stadium_name | seating_capacity |
|---|---|---|---|---|---|
| 1 | 22 | 1934-08-25 | Georgia national football team | Stadio Olimpico Grande Torino | 27958 |
| 2 | 23 | 1934-07-10 | Italy national football team | Stadio Olimpico Grande Torino | 27958 |
| 3 | 24 | 1934-07-30 | Spain national football team | Stadio Olimpico Grande Torino | 27958 |
| 4 | 25 | 1934-08-29 | Sweden national football team | Stadio Olimpico Grande Torino | 27958 |
| 5 | 26 | 1934-07-16 | Nigeria national football team | Stadio Olimpico Grande Torino | 27958 |
| 6 | 28 | 1938-07-30 | South Korea national football team | Stade de la Meinau | 26109 |
| 7 | 29 | 1938-07-10 | France national football team | Stade de la Meinau | 26109 |
| 8 | 30 | 1938-07-13 | England national football team | Stade de la Meinau | 26109 |
| 9 | 31 | 1938-08-13 | Romania national football team | Stade de la Meinau | 26109 |

**--Query 2: Calculate the average seating capacity of stadiums for each continent.**
**--analysis: This query provides managers with insights into the average seating capacity of stadiums across different continents, aiding in strategic decisions regarding event planning and sponsorship. According to the result, average capacity in European cities is around 16589 and in South America cities is around 15896. Stadium capacity in European countries has the most capacity.**

```
WITH AverageSeating AS (
   SELECT c.continent, AVG(s.seating_capacity) AS avg_seating_capacity
   FROM stadium s
   JOIN city c ON s.city_id = c.city_id
   GROUP BY c.continent
)
SELECT * FROM AverageSeating;
```

```
548
549    WITH AverageSeating AS (
550        SELECT c.continent, AVG(s.seating_capacity) AS avg_seating_capacity
551        FROM stadium s
552        JOIN city c ON s.city_id = c.city_id
553        GROUP BY c.continent
554    )
555    SELECT * FROM AverageSeating;
556
557
558
559
```

Results Messages

| | continent | avg_seating_capacity |
|---|---|---|
| 1 | Europe | 16589 |
| 2 | South America | 15896 |

**--Query 3: List teams and their total number of matches played.**
**--analysis: Managers can use this query to evaluate team performance and engagement by analyzing the total number of matches played by each team. According to the results, the Italy National football team had the most matches.**

```
SELECT t.team_name, COUNT(sch.match_id) AS total_matches_played
FROM team t
LEFT JOIN schedule sch ON t.team_id = sch.team_id
GROUP BY t.team_name
ORDER BY total_matches_played DESC;
```

```sql
--3--
SELECT t.team_name, COUNT(sch.match_id) AS total_matches_played
FROM team t
LEFT JOIN schedule sch ON t.team_id = sch.team_id
GROUP BY t.team_name
ORDER BY total_matches_played DESC;
```

Results Messages

| | team_name | total_matches_played |
|---|---|---|
| 1 | Italy national football team | 6 |
| 2 | France national football team | 5 |
| 3 | South Korea national football team | 5 |
| 4 | Spain national football team | 5 |
| 5 | Sweden national football team | 5 |
| 6 | Nigeria national football team | 4 |
| 7 | Poland national football team | 4 |
| 8 | Romania national football team | 2 |
| 9 | Brazil national football team | 2 |
| 10 | England national football team | 2 |
| 11 | Georgia national football team | 1 |
| 12 | Namibia national football team | 1 |
| 13 | United States national football t… | 1 |
| 14 | Uruguay national football team | 1 |
| 15 | Argentina national football team | 1 |

**--Query 4: List countries with stadiums having a seating capacity above the average.**
**--analysis: This can help identifying countries with stadiums boasting seating capacities above the average is crucial for optimizing resource allocation, maximizing sponsorship opportunities. According to the results, stadiums in Brazil, Italy, Switzerland have the most capacity that is above the average.**

```
SELECT c.country, AVG(s.seating_capacity) AS avg_seating_capacity
FROM city c
JOIN stadium s ON c.city_id = s.city_id
GROUP BY c.country
HAVING AVG(s.seating_capacity) > (SELECT AVG(seating_capacity) FROM stadium);
```

```
565    --4--
566    SELECT c.country, AVG(s.seating_capacity) AS avg_seating_capacity
567    FROM city c
568    JOIN stadium s ON c.city_id = s.city_id
569    GROUP BY c.country
570    HAVING AVG(s.seating_capacity) > (SELECT AVG(seating_capacity) FROM stadium);
571
572
573
574
```

Results Messages

| | country | avg_seating_capacity |
|---|---|---|
| 1 | Brazil | 21006 |
| 2 | Italy | 17979 |
| 3 | Switzerland | 21300 |

**--Query 5: Find which type of sponsor funded the most in teams from europe.**
**--analysis: It provides insights into the financial landscape of European teams, helps identify the most preferred types of sponsors, and can guide future sponsorship strategies. According to the results, companies of pharmacologists have funded 21 teams in Europe.**

```
SELECT TOP 1 s.sponsor_type, COUNT(*) AS sponsorship_count
FROM sponsor_team st
JOIN sponsor s ON st.sponsor_id = s.sponsor_id
JOIN team t ON st.team_id = t.team_id
JOIN city c ON t.country = c.country
WHERE c.continent = 'Europe'
GROUP BY s.sponsor_type
ORDER BY sponsorship_count DESC;
```

```sql
--5--
SELECT TOP 1 s.sponsor_type, COUNT(*) AS sponsorship_count
FROM sponsor_team st
JOIN sponsor s ON st.sponsor_id = s.sponsor_id
JOIN team t ON st.team_id = t.team_id
JOIN city c ON t.country = c.country
WHERE c.continent = 'Europe'
GROUP BY s.sponsor_type
ORDER BY sponsorship_count DESC;
```

Results Messages

| | sponsor_type | sponsorship_count |
|---|---|---|
| 1 | Pharmacologist | 21 |

**--Query 6: Find Referees with the Highest Number of Matches**
**--analysis: This query identifies referees with the highest number of officiated matches, providing insights into referee performance and workload. According to the results, we find that Shane Lewis has the most workload among all the other referees.**

```sql
SELECT TOP 1 referee.referee_id,
    referee.referee_firstname,
    referee.referee_lastname,
    COUNT(match.match_id) AS match_count
FROM referee
JOIN match ON referee.referee_id = match.referee_id
GROUP BY referee.referee_id
ORDER BY match_count DESC;
```

```sql
--6--
SELECT TOP 1 referee.referee_id,
        referee.referee_firstname,
        referee.referee_lastname,
        COUNT(match.match_id) AS match_count
FROM referee
JOIN match ON referee.referee_id = match.referee_id
GROUP BY referee.referee_id,  referee.referee_firstname, referee.referee_lastname
ORDER BY match_count DESC;
```

Results Messages

| | referee_id | referee_firstname | referee_lastname | match_count |
|---|---|---|---|---|
| 1 | 9989 | Shane | Lewis | 3 |

--Fangzhou Xie–

```sql
SELECT t.team_name, SUM(s.fund) AS TotalSponsorship
FROM team t
JOIN sponsor_team st ON t.team_id = st.team_id
JOIN sponsor s ON st.sponsor_id = s.sponsor_id
GROUP BY t.team_name;
```

This query represents the aggregate amount of sponsorship funds each team has received. The amounts are quite substantial, with teams like Argentina national football teams showing particularly high sponsorship funds. Other teams, like France national football teams, while still significant, show comparatively lower totals. Teams with lower sponsorship should analyze the market strategies of teams with higher sponsorship to identify opportunities for increased revenue.

```sql
--1--

SELECT t.team_name, SUM(s.fund) AS TotalSponsorship
FROM team t
JOIN sponsor_team st ON t.team_id = st.team_id
JOIN sponsor s ON st.sponsor_id = s.sponsor_id
GROUP BY t.team_name;
```

Results Messages

| | team_name | TotalSponsorship |
|---|---|---|
| 1 | Argentina national football team | 1113000000 |
| 2 | Brazil national football team | 1595000000 |
| 3 | England national football team | 349000000 |
| 4 | France national football team | 49000000 |
| 5 | Georgia national football team | 3340000000 |
| 6 | Italy national football team | 3852000000 |
| 7 | Namibia national football team | 1365000000 |
| 8 | Nigeria national football team | 1397000000 |
| 9 | Poland national football team | 2253000000 |
| 10 | Romania national football team | 830000000 |
| 11 | South Korea national football t… | 1539000000 |
| 12 | Spain national football team | 1704000000 |
| 13 | Sweden national football team | 749000000 |
| 14 | United States national football… | 3344000000 |
| 15 | Uruguay national football team | 1078000000 |

–2–

```sql
WITH SponsorFunds AS (
    SELECT st.team_id, t.team_name, SUM(sp.fund) AS total_funds
    FROM sponsor_team st
    JOIN sponsor sp ON st.sponsor_id = sp.sponsor_id
    JOIN team t ON st.team_id = t.team_id
    GROUP BY st.team_id, t.team_name
)
SELECT team_name, total_funds
FROM SponsorFunds
```

```
WHERE total_funds > (
   SELECT AVG(total_funds) FROM SponsorFunds
)
ORDER BY total_funds DESC;
```

The query gives the total sponsorship funds received by various football teams from their sponsors, displaying the teams with the highest sponsorship funds at the top. The Italy national football team has the highest total sponsorship funds with 385,200,000. There is a clear concentration of sponsorship funds among the top teams. Management should be aware of the reliance on a few large sponsors and consider diversifying the sponsorship portfolio to reduce financial risk.

```
542    --2--
543
544    WITH SponsorFunds AS (
545        SELECT st.team_id, t.team_name, SUM(sp.fund) AS total_funds
546        FROM sponsor_team st
547        JOIN sponsor sp ON st.sponsor_id = sp.sponsor_id
548        JOIN team t ON st.team_id = t.team_id
549        GROUP BY st.team_id, t.team_name
550    )
551    SELECT team_name, total_funds
552    FROM SponsorFunds
553    WHERE total_funds > (
554        SELECT AVG(total_funds) FROM SponsorFunds
555    )
556    ORDER BY total_funds DESC;
557
```

Results Messages

| | team_name | total_funds |
|---|---|---|
| 1 | Italy national football team | 3852000000 |
| 2 | United States national football team | 3344000000 |
| 3 | Georgia national football team | 3340000000 |
| 4 | Poland national football team | 2253000000 |
| 5 | Spain national football team | 1704000000 |

–3–

Teams with More than 20 Members and Their Match Locations

```
SELECT t.team_name, c.city_name, s.stadium_name
FROM team t
JOIN schedule sch ON t.team_id = sch.team_id
```

```
JOIN match m ON sch.match_id = m.match_id
JOIN round r ON m.round_id = r.round_id
JOIN fixture_city fc ON r.fixture_id = fc.fixture_id
JOIN city c ON fc.city_id = c.city_id
JOIN stadium s ON c.city_id = s.city_id
WHERE t.team_name IN (SELECT team_name FROM team WHERE member_num > 20);
```

The query retrieves a list of match venues for the Italy national football team. It filters the results to include only those teams with more than 20 members. The Italy national football team is associated with multiple cities and stadiums. Management could monitor the team's performance in different venues to assess if there's any impact of the stadium or location on the team's performance, which could be factored into future training and preparation.

```
561
562    SELECT t.team_name, c.city_name, s.stadium_name
563    FROM team t
564    JOIN schedule sch ON t.team_id = sch.team_id
565    JOIN match m ON sch.match_id = m.match_id
566    JOIN round r ON m.round_id = r.round_id
567    JOIN fixture_city fc ON r.fixture_id = fc.fixture_id
568    JOIN city c ON fc.city_id = c.city_id
569    JOIN stadium s ON c.city_id = s.city_id
570    WHERE t.team_name IN (SELECT team_name FROM team WHERE member_num > 20);
571
572
573    --4--
574
```

Results Messages

| | team_name | city_name | stadium_name |
|---|---|---|---|
| 1 | Italy national football team | Trieste | Stadio Giuseppe Grezar |
| 2 | Italy national football team | Turin | Stadio Olimpico Grande Torino |
| 3 | Italy national football team | Porto Alegre | Eucaliptos |
| 4 | Italy national football team | Belo Horizonte | Independência |
| 5 | Italy national football team | Curitiba | Vila Capanema |

–4–

```
SELECT t.team_name, COUNT(*) AS match_count
FROM team t
JOIN schedule s ON t.team_id = s.team_id
JOIN match m ON s.match_id = m.match_id
JOIN round r ON m.round_id = r.round_id
WHERE r.round_stage = 'final'
GROUP BY t.team_name
```

ORDER BY match_count DESC;

The query is designed to count the number of final round matches played by each football team, teams with the most final round matches appear at the top. The Spain national football team has played the most final round matches, with a count of 2. Sweden, Argentina, Italy, Romania, and South Korea national football teams have each played 1 final round match. The management could use this data to analyze performance in final round matches, identifying which teams are more experienced and potentially more successful in this critical stage of competition.

```
573    --4--
574
575    SELECT t.team_name, COUNT(*) AS match_count
576    FROM team t
577    JOIN schedule s ON t.team_id = s.team_id
578    JOIN match m ON s.match_id = m.match_id
579    JOIN round r ON m.round_id = r.round_id
580    WHERE r.round_stage = 'final'
581    GROUP BY t.team_name
582    ORDER BY match_count DESC;
583
584
585
586
```

Results Messages

| | team_name | match_count |
|---|---|---|
| 1 | Spain national football team | 2 |
| 2 | Sweden national football team | 1 |
| 3 | Argentina national football team | 1 |
| 4 | Italy national football team | 1 |
| 5 | Romania national football team | 1 |
| 6 | South Korea national football team | 1 |

```
WITH ContinentTeams AS (
    SELECT DISTINCT t.team_id, c.continent
    FROM team t
    JOIN schedule s ON t.team_id = s.team_id
    JOIN match m ON s.match_id = m.match_id
    JOIN round r ON m.round_id = r.round_id
    JOIN fixture f ON r.fixture_id = f.fixture_id
    JOIN fixture_city fc ON f.fixture_id = fc.fixture_id
    JOIN city c ON fc.city_id = c.city_id
)
SELECT ct.continent, AVG(t.member_num) AS average_members
FROM ContinentTeams ct
JOIN team t ON ct.team_id = t.team_id
GROUP BY ct.continent;
```

This query calculates the average number of members in football teams by continent. Teams from Europe have an average of 15 members. Teams from South America have an average of 16 members. European teams may need to invest more in their youth and development programs to expand their pool of available talent, given they have, on average, fewer members. South American teams might have a slightly larger pool of players to choose from for their main squads, suggesting robust recruitment strategies or a greater emphasis on cultivating a larger team. For international competitions, knowing the average team size can help in strategic planning, such as anticipating the depth of the opponent's squad and potential substitutions.

```
587    --5--
588
589    WITH ContinentTeams AS (
590        SELECT DISTINCT t.team_id, c.continent
591        FROM team t
592        JOIN schedule s ON t.team_id = s.team_id
593        JOIN match m ON s.match_id = m.match_id
594        JOIN round r ON m.round_id = r.round_id
595        JOIN fixture f ON r.fixture_id = f.fixture_id
596        JOIN fixture_city fc ON f.fixture_id = fc.fixture_id
597        JOIN city c ON fc.city_id = c.city_id
598    )
599    SELECT ct.continent, AVG(t.member_num) AS average_members
600    FROM ContinentTeams ct
601    JOIN team t ON ct.team_id = t.team_id
602    GROUP BY ct.continent;
603
```

Results Messages

| | continent | average_members |
|---|---|---|
| 1 | Europe | 15 |
| 2 | South America | 16 |

–6–

```
SELECT TOP 4 r.referee_firstname, r.referee_lastname, COUNT(DISTINCT c.city_id) AS cities_worked
FROM referee r
JOIN match m ON r.referee_id = m.referee_id
JOIN round rd ON m.round_id = rd.round_id
JOIN fixture f ON rd.fixture_id = f.fixture_id
JOIN fixture_city fc ON f.fixture_id = fc.fixture_id
JOIN city c ON fc.city_id = c.city_id
GROUP BY r.referee_firstname, r.referee_lastname
ORDER BY cities_worked DESC;
```

This query is designed to list the top four referees who have officiated matches in the most number of distinct cities. The results are ordered in descending order to find those who have worked in the most cities. Referee Lindsay Richardson has worked in the highest number of cities, totaling 10. Lindsay Richardson's experience across 10 different cities suggests a broad exposure to various teams and playing

conditions, which could be beneficial for officiating in diverse situations. These referees could be utilized in mentorship roles to share their experiences with less-traveled referees, helping them to adapt to different environments and crowds.

```
588    --6--
589    SELECT TOP 4 r.referee_firstname, r.referee_lastname, COUNT(DISTINCT c.city_id) AS cities_worked
590    FROM referee r
591    JOIN match m ON r.referee_id = m.referee_id
592    JOIN round rd ON m.round_id = rd.round_id
593    JOIN fixture f ON rd.fixture_id = f.fixture_id
594    JOIN fixture_city fc ON f.fixture_id = fc.fixture_id
595    JOIN city c ON fc.city_id = c.city_id
596    GROUP BY r.referee_firstname, r.referee_lastname
597    ORDER BY cities_worked DESC;
598
599
```

Results Messages

| | referee_firstname | referee_lastname | cities_worked |
|---|---|---|---|
| 1 | Lindsay | Richardson | 10 |
| 2 | Aaron | Hart | 9 |
| 3 | Brian | May | 9 |
| 4 | Robert | Todd | 9 |

–Yuanxi Li–

```
--1--
SELECT r.referee_firstname, r.referee_lastname, COUNT(m.match_id) AS total_matches
FROM referee r
JOIN match m ON r.referee_id = m.referee_id
GROUP BY r.referee_id;
```

The SQL query displays a count of matches each referee has officiated. Most referees have overseen one or two matches, indicating a balanced workload. Management could use this data for assigning matches evenly and evaluating referees' experience for FIFA.

```
530
531   SELECT r.referee_firstname, r.referee_lastname, COUNT(m.match_id) AS total_matches
532   FROM referee r
533   JOIN match m ON r.referee_id = m.referee_id
534   GROUP BY r.referee_id, r.referee_firstname, r.referee_lastname;
535
```

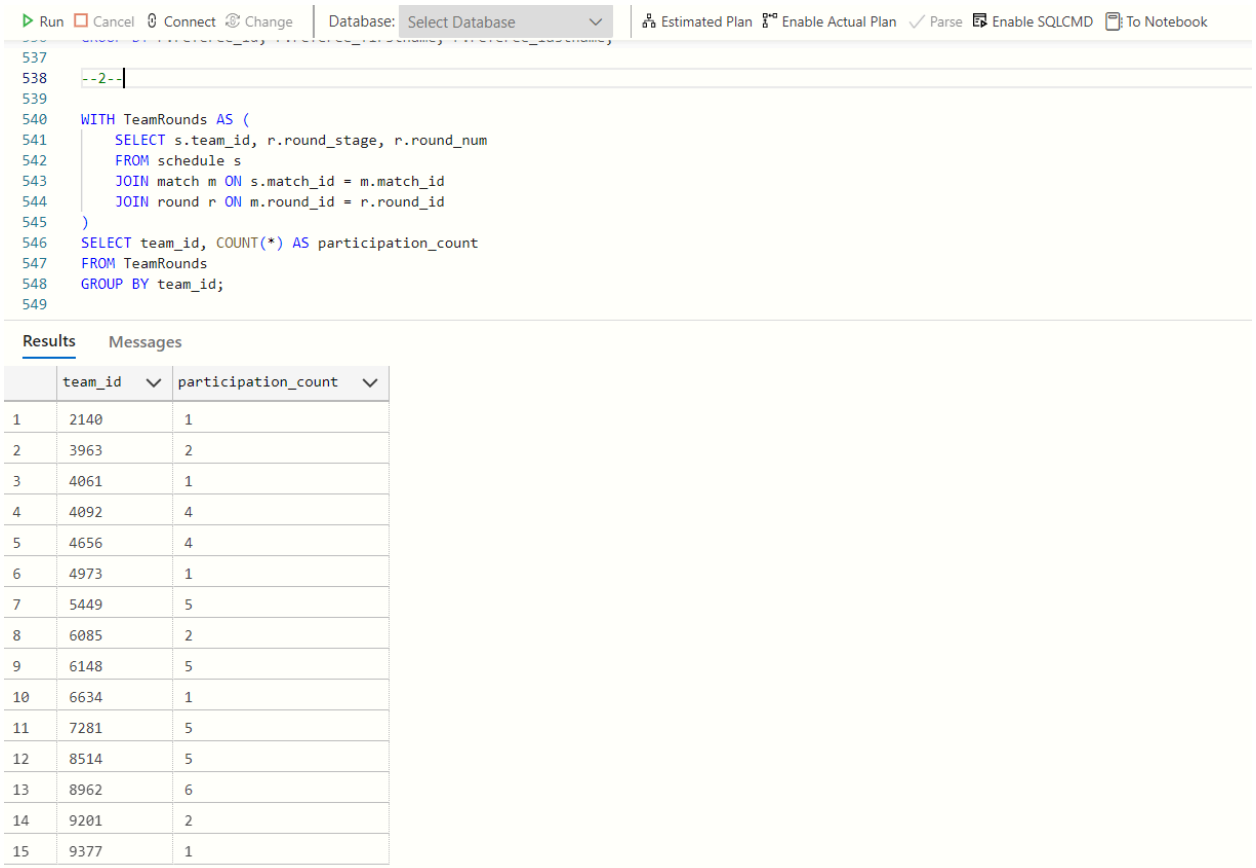
Results Messages

| | referee_firstname | referee_lastname | total_matches |
|---|---|---|---|
| 1 | Brian | May | 2 |
| 2 | Elizabeth | Collins | 1 |
| 3 | Nicole | Travis | 2 |
| 4 | Erica | Clarke | 1 |
| 5 | Alan | Montgomery | 2 |
| 6 | Sarah | Velez | 1 |
| 7 | Robert | Todd | 1 |
| 8 | Christopher | Thornton | 2 |
| 9 | Matthew | Hansen | 2 |
| 10 | Rebecca | Shaw | 1 |
| 11 | Lindsay | Richardson | 2 |
| 12 | Daniel | Bates | 1 |
| 13 | Shannon | Duran | 2 |
| 14 | Matthew | Stephens | 1 |
| 15 | Wanda | Contreras | 1 |
| 16 | Amanda | Alvarez | 1 |
| 17 | Laura | Adams | 1 |
| 18 | Amber | Nielsen | 1 |
| 19 | Michelle | Smith | 1 |
| 20 | Toni | Arroyo | 1 |

```
--2--
WITH TeamRounds AS (
   SELECT t.team_id, r.round_stage, r.round_num
   FROM team t
   JOIN match m ON t.team_id = m.team_id
   JOIN round r ON m.round_id = r.round_id
)
SELECT team_id, COUNT(*) AS participation_count
FROM TeamRounds
GROUP BY team_id;
```

The query lists the total number of round participations for each team. Several teams have participated in 1 round only. Teams with lower participation counts may need to focus on development programs and

strategies to improve their performance in competitions to advance through more rounds. Teams with higher participation counts might have more opportunities for fan engagement and can leverage their success to boost merchandise sales, ticket sales, and fan events.




| | team_id | participation_count |
|---|---|---|
| 1 | 2140 | 1 |
| 2 | 3963 | 2 |
| 3 | 4061 | 1 |
| 4 | 4092 | 4 |
| 5 | 4656 | 4 |
| 6 | 4973 | 1 |
| 7 | 5449 | 5 |
| 8 | 6085 | 2 |
| 9 | 6148 | 5 |
| 10 | 6634 | 1 |
| 11 | 7281 | 5 |
| 12 | 8514 | 5 |
| 13 | 8962 | 6 |
| 14 | 9201 | 2 |
| 15 | 9377 | 1 |

```
--3--
SELECT f.year, f.sequence_num, COUNT(*) AS match_count
FROM fixture f
JOIN round r ON f.fixture_id = r.fixture_id
JOIN match m ON r.round_id = m.round_id
GROUP BY f.year, f.sequence_num;
```

The query counts the number of matches that took place in each fixture of various years. The years 1994 (sequence 15) and 2018 (sequence 21) had the fewest matches, with 2 and 4 respectively. Management can use this data for strategic planning, ensuring that all aspects of event hosting are covered. With the

increasing number of matches in certain years, it's important to consider sustainable practices to manage the environmental impact of hosting these events.

```
551    --3--
552
553    SELECT f.year, f.sequence_num, COUNT(*) AS match_count
554    FROM fixture f
555    JOIN round r ON f.fixture_id = r.fixture_id
556    JOIN match m ON r.round_id = m.round_id
557    GROUP BY f.year, f.sequence_num;
558
559    --4--
560
561    SELECT AVG(match_count) AS avg_matches_per_round
```

Results Messages

| | year | sequence_num | match_count |
|---|---|---|---|
| 1 | 1930 | 1 | 4 |
| 2 | 1934 | 2 | 5 |
| 3 | 1938 | 3 | 4 |
| 4 | 1950 | 4 | 6 |
| 5 | 1990 | 14 | 7 |
| 6 | 1994 | 15 | 4 |
| 7 | 1998 | 16 | 6 |
| 8 | 2006 | 18 | 3 |
| 9 | 2018 | 21 | 2 |
| 10 | 2022 | 22 | 4 |

--4—

**Find the City with the Highest Average Stadium Seating Capacity**

```
SELECT city_name, AVG(seating_capacity) AS average_capacity
FROM stadium s
JOIN city c ON s.city_id = c.city_id
```

```
GROUP BY city_name
HAVING AVG(seating_capacity) = (
   SELECT MAX(average_capacity) FROM (
      SELECT AVG(seating_capacity) AS average_capacity
      FROM stadium
      GROUP BY city_id
   ) AS MaxCapacity
);
```

This query finds the city with the highest average seating capacity of stadiums. The city of Turin has the highest average seating capacity for stadiums, with an average capacity of 27,958. The city of Turin has the highest average seating capacity for stadiums, with an average capacity of 27,958. The city can capitalize on its high-capacity stadiums to boost tourism, by attracting visitors for football matches, concerts, and other events.

```
559    --4--
560
561    SELECT city_name, AVG(seating_capacity) AS average_capacity
562    FROM stadium s
563    JOIN city c ON s.city_id = c.city_id
564    GROUP BY city_name
565    HAVING AVG(seating_capacity) = (
566        SELECT MAX(average_capacity) FROM (
567            SELECT AVG(seating_capacity) AS average_capacity
568            FROM stadium
569            GROUP BY city_id
```

Results Messages

| | city_name | average_capacity |
|---|---|---|
| 1 | Turin | 27958 |

```
--5--
WITH YearlyMatches AS (
   SELECT t.team_id, f.year, COUNT(m.match_id) AS matches_played
   FROM team t
   JOIN match m ON t.team_id = m.team_id
   JOIN round r ON m.round_id = r.round_id
   JOIN fixture f ON r.fixture_id = f.fixture_id
   GROUP BY t.team_id, f.year
```

```
)
SELECT year, MAX(matches_played) AS max_matches_played
FROM YearlyMatches
GROUP BY year;
```

This query finds the maximum number of matches played by any team in each year. Teams may need to allocate more resources to training and medical staff to ensure players are well-supported during years with more frequent matches. Teams can use this historical data to analyze performance trends in years with more matches and adjust their strategies accordingly.

```
569    --5--
570
571    WITH YearlyMatches AS (
572        SELECT s.team_id, f.year, COUNT(m.match_id) AS matches_played
573        FROM schedule s
574        JOIN match m ON s.match_id = m.match_id
575        JOIN round r ON m.round_id = r.round_id
```

Results Messages

| | year | max_matches_played |
|---|---|---|
| 1 | 1930 | 1 |
| 2 | 1934 | 1 |
| 3 | 1938 | 1 |
| 4 | 1950 | 1 |
| 5 | 1990 | 2 |
| 6 | 1994 | 1 |
| 7 | 1998 | 2 |
| 8 | 2006 | 1 |
| 9 | 2018 | 1 |
| 10 | 2022 | 2 |

```
--6–
SELECT m.match_id, m.match_date, t.team_name, r.referee_firstname, r.referee_lastname
FROM match m
JOIN schedule s ON m.match_id = s.match_id
JOIN team t ON s.team_id = t.team_id
JOIN referee r ON m.referee_id = r.referee_id
```

ORDER BY m.match_date;

The query retrieves a list of football matches with dates, participating team names, and the names of referees. The results show historical match data. For management, this information could help in analyzing referee assignments, planning for future matches, or reviewing past team performances.

```
601    --6--
602    SELECT m.match_id, m.match_date, t.team_name, r.referee_firstname, r.referee_lastname
603    FROM match m
604    JOIN schedule s ON m.match_id = s.match_id
605    JOIN team t ON s.team_id = t.team_id
606    JOIN referee r ON m.referee_id = r.referee_id
607    ORDER BY m.match_date;
608
609
```

Results Messages

| | match_id | match_date | team_name | referee_firstname | referee_lastname |
|---|---|---|---|---|---|
| 1 | 10 | 1930-07-30 | Uruguay national football team | Lindsay | Richardson |
| 2 | 17 | 1930-08-12 | United States national football team | Amanda | Alvarez |
| 3 | 18 | 1930-08-16 | Namibia national football team | Rebecca | Shaw |
| 4 | 20 | 1930-08-28 | Argentina national football team | Alan | Montgomery |
| 5 | 23 | 1934-07-10 | Italy national football team | Shannon | Duran |
| 6 | 26 | 1934-07-16 | Nigeria national football team | Erica | Clarke |
| 7 | 24 | 1934-07-30 | Spain national football team | Matthew | Hansen |
| 8 | 22 | 1934-08-25 | Georgia national football team | Nicole | Travis |
| 9 | 25 | 1934-08-29 | Sweden national football team | Michelle | Smith |
| 10 | 29 | 1938-07-10 | France national football team | Lindsay | Richardson |
| 11 | 30 | 1938-07-13 | England national football team | Aaron | Hart |
| 12 | 28 | 1938-07-30 | South Korea national football team | Robert | Todd |
| 13 | 31 | 1938-08-13 | Romania national football team | Brian | May |
| 14 | 36 | 1950-06-06 | Poland national football team | Paul | Fowler |
| 15 | 37 | 1950-06-21 | Italy national football team | Jessica | Brock |
| 16 | 41 | 1950-06-24 | Nigeria national football team | Daniel | Bates |
| 17 | 38 | 1950-07-16 | Spain national football team | Christopher | Thornton |
| 18 | 39 | 1950-07-20 | Sweden national football team | Laura | Adams |