Question#	Answer
1	Not Required
2	https://lucid.app/lucidchart/940d7d87-d406-4c24-8147-4d305bf02bfb/edit?viewport_loc=95%2C-77%2C2568%2C1464%2C0_0&invitationId=inv_8beaa73d-cff7-42f7-9a28-abe0c9b42a65

3	```sql
	SELECT DATE_DIFF(MAX(date), MIN(date), DAY) AS num_of_days FROM `sql-sandbox-422308.Final_Exercise.match`;
	``
	
	Answer = 2868 days

| 4 | ```sql
SELECT season, name, MIN(home_team_goal) AS min_home_goal,
AVG(home_team_goal) AS avg_home_goal,
((MAX(home_team_goal) + MIN(home_team_goal))/2) AS mid_range_goal,
MAX(home_team_goal) AS max_home_goal,
SUM(home_team_goal) AS sum_home_goal
FROM `sql-sandbox-422308.Final_Exercise.match` AS m
LEFT JOIN `sql-sandbox-422308.Final_Exercise.leagues` AS l
ON m.country_id = l.country_id
GROUP BY season, name
ORDER BY sum_home_goal desc;
```

England Premier League 2009/2010 has the highest number of home goals scored with 645 goals |
|---|---|
| 5 | ```sql
SELECT season, name, count(m.id) AS count
FROM `sql-sandbox-422308.Final_Exercise.match` AS m
LEFT JOIN `sql-sandbox-422308.Final_Exercise.leagues` AS l
ON m.country_id = l.country_id
GROUP BY season, name
ORDER BY count;
```

The Belgium Jupiler League 2013/2014 season played only 12 games, this looks strange. Maybe the league season was canceled at an early start, in my opinion though. |

| 6 | ```sql
CREATE TABLE `sql-sandbox-422308.Final_Exercise.PlayerBMI`
AS SELECT (weight/2.205) AS kg_weight, (height/100) AS m_height,
(weight/2.205)/POW((height/100), 2) AS BMI
FROM `sql-sandbox-422308.Final_Exercise.player`;

SELECT COUNT(*) AS count_of_rows
FROM `sql-sandbox-422308.Final_Exercise.PlayerBMI`
WHERE BMI BETWEEN 18.5 AND 24.9;
```

10197 rows |
|---|---|
| 7 | ```sql
SELECT COUNT(*) AS count_of_rows
FROM `sql-sandbox-422308.Final_Exercise.PlayerBMI`
WHERE BMI NOT BETWEEN 18.5 AND 24.9;
```

863 rows |
| 8 | ```sql
SELECT team_long_name, season, (SUM(home_team_goal) + SUM(away_team_goal)) AS total_goal
FROM `sql-sandbox-422308.Final_Exercise.match` AS m
LEFT JOIN `sql-sandbox-422308.Final_Exercise.team` AS t
ON m.home_team_api_id = t.team_api_id
GROUP BY team_long_name, season
ORDER BY season DESC, total_goal DESC;
```

Real Madrid FC 2015/2016 season has the highest number of total goals with 86 goals |

| 9 | ```sql
SELECT season, team_long_name,
FROM (SELECT season, team_long_name, RANK() OVER (PARTITION BY season ORDER
BY (SUM(home_team_goal) + SUM(away_team_goal)) DESC) as position FROM
`sql-sandbox-422308.Final_Exercise.match` AS m
LEFT JOIN  `sql-sandbox-422308.Final_Exercise.team` AS t
ON m.home_team_api_id = t.team_api_id
GROUP BY season, team_long_name
ORDER BY season)
WHERE position = 1;
```

Real Madrid FC was ranked first in 6 seasons |
|---|---|
| 10 | ```sql
CREATE TABLE `sql-sandbox-422308.Final_Exercise.TopScorer`
AS SELECT t.id AS team_id, team_long_name, (SUM(home_team_goal) +
SUM(away_team_goal)) AS total_goal
FROM `sql-sandbox-422308.Final_Exercise.match` AS m
LEFT JOIN `sql-sandbox-422308.Final_Exercise.team` AS t
ON m.home_team_api_id = t.team_api_id
GROUP BY t.id, team_long_name
ORDER BY total_goal DESC
LIMIT 10;

SELECT t1.team_long_name AS team_1, t2.team_long_name AS team_2
FROM `sql-sandbox-422308.Final_Exercise.TopScorer` AS t1
JOIN `sql-sandbox-422308.Final_Exercise.TopScorer` AS t2
ON t1.team_id < t2.team_id;
```

It generated 45 possible combinations. |