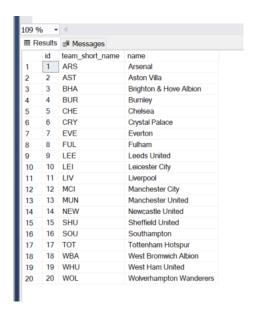
Premier League 2020-21

PL 2020-21

SELECT * FROM teams



SELECT * FROM gameweek (38 records)

id	name	start_date	end_date
1	Gameweek 1	2020-09-12	2020-09-14
2	Gameweek 2	2020-09-19	2020-09-21
3	Gameweek 3	2020-09-26	2020-09-28
4	Gameweek 4	2020-10-03	2020-10-04
5	Gameweek 5	2020-10-17	2020-10-19
6	Gameweek 6	2020-10-23	2020-10-26
7	Gameweek 7	2020-10-30	2020-11-02
8	Gameweek 8	2020-11-06	2020-11-08
9	Gameweek 9	2020-11-21	2020-11-23
10	Gameweek 10	2020-11-27	2020-11-30
11	Gameweek 11	2020-12-05	2020-12-07
12	Gameweek 12	2020-12-12	2020-12-14
13	Gameweek 13	2020-12-15	2020-12-17
14	Gameweek 14	2020-12-19	2020-12-21
15	Gameweek 15	2020-12-26	2020-12-27
16	Gameweek 16	2020-12-28	2020-12-30
17	Gameweek 17	2021-01-01	2021-01-04
18	Gameweek 18	2021-01-21	2021-01-14
19	Gameweek 19	2021-01-16	2021-01-21
21	Gameweek 20	2021-01-26	2021-01-28
22	Gameweek 21	2021-01-30	2021-01-31
23	Gameweek 22	2021-02-02	2021-02-04
24	Gameweek 23	2021-02-06	2021-02-08
26	Gameweek 24	2021-02-13	2021-02-17

SELECT * FROM players (615 records)



SELECT * FROM match (247 records)

	id	date	time	gameweek_id	venue_id	hometeam_id	awayteam_id
1	1001	2020-09-12	12:30:00.0000000	1	8	8	1
2	1002	2020-09-12	15:00:00.0000000	1	6	6	16
3	1003	2020-09-12	17:30:00.0000000	1	11	11	9
4	1004	2020-09-12	20:00:00.0000000	1	19	19	14
5	1005	2020-09-13	14:00:00.0000000	1	18	18	10
6	1006	2020-09-13	16:30:00.0000000	1	17	17	7
7	1007	2020-09-14	18:00:00.0000000	1	15	15	20
8	1008	2020-09-14	20:15:00.0000000	1	3	3	5
9	1009	2020-09-19	12:30:00.0000000	2	7	7	18
10	1010	2020-09-19	15:00:00.0000000	2	9	9	8
11	1011	2020-09-19	17:30:00.0000000	2	13	13	6
12	1012	2020-09-19	20:00:00.0000000	2	1	1	19
13	1013	2020-09-20	12:00:00.0000000	2	16	16	17
14	1014	2020-09-20	14:00:00.0000000	2	14	14	3
15	1015	2020-09-20	16:30:00.0000000	2	5	5	11
16	1016	2020-09-20	19:00:00.0000000	2	10	10	4
17	1017	2020-09-20	18:00:00.0000000	2	2	2	15
18	1018	2020-09-21	20:15:00.0000000	2	20	20	12
19	1019	2020-09-26	12:30:00.0000000	3	3	3	13
20	1020	2020-09-26	15:00:00.0000000	3	6	6	7
21	1021	2020-09-26	17:30:00.0000000	3	18	18	5
22	1022	2020-09-26	20:00:00.0000000	3	4	4	16
23	1023	2020-09-27	12:00:00.0000000	3	15	15	9
2/	1024	2020-09-27	14:00:00 0000000	3	17	17	14

SELECT * FROM scores (247 records)

	match_id	gameweek_id	venue_id	hometeam_id	awayteam_id	hometeam_goal	awayteam_goa
1	1001	1	8	8	1	0	3
2	1002	1	6	6	16	1	0
3	1003	1	11	11	9	4	3
4	1004	1	19	19	14	0	2
5	1005	1	18	18	10	0	3
6	1006	1	17	17	7	0	1
7	1007	1	15	15	20	0	2
8	1008	1	3	3	5	1	3
9	1009	2	7	7	18	5	2
10	1010	2	9	9	8	4	3
11	1011	2	13	13	6	1	3
12	1012	2	1	1	19	2	1
13	1013	2	16	16	17	2	5
14	1014	2	14	14	3	0	3
15	1015	2	5	5	11	0	2
16	1016	2	10	10	4	4	2
17	1017	2	2	2	15	1	0
18	1018	2	20	20	12	1	3
19	1019	3	3	3	13	2	3
20	1020	3	6	6	7	1	2
21	1021	3	18	18	5	3	3
22	1022	3	4	4	16	0	1
23	1023	3	15	15	9	0	1
2/	1024	3	17	17	14	1	1

SELECT * FROM goals (639 records)

	id	match_id	player_id	team_id	goal_time	goal_half	assist_id
1	1	1001	2109	1	8	1	NULL
2	2	1001	2106	1	49	2	2112
3	3	1001	2114	1	57	2	2112
4	4	1002	2611	6	13	1	2610
5	5	1003	3111	11	4	1	NULL
6	6	1003	2922	9	12	1	2923
7	7	1003	3104	11	20	1	3126
8	8	1003	2909	9	30	1	NULL
9	9	1003	3111	11	33	1	NULL
10	10	1003	2943	9	66	2	2917
11	11	1003	3111	11	88	2	NULL
12	12	1004	3413	14	56	2	3416
13	13	1004	3416	14	87	2	3424
14	14	1005	3027	10	56	2	3026
15	15	1005	3009	10	74	2	NULL
16	16	1005	3009	10	84	2	NULL
17	17	1006	2709	7	55	2	2712
18	18	1007	4009	20	3	1	4010
19	19	1007	4027	20	6	1	4007
20	20	1008	2505	5	23	1	NULL
21	21	1008	2311	3	54	2	2302
22	22	1008	2524	5	56	2	2505
23	23	1008	2515	5	66	2	2524
2/	24	1009	3811	18	10	1	3812

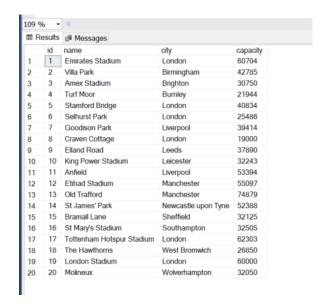
SELECT * FROM cards (734 records)

	id	match_id	player_id	team_id	card_id	card_time
1	1	1001	2803	8	1	26
2	2	1001	2114	1	1	39
3	3	1001	2102	1	1	55
4	4	1001	2810	8	1	61
5	5	1002	2615	6	1	41
6	6	1002	3602	16	1	51
7	7	1002	2622	6	1	58
8	8	1003	3109	11	1	76
9	9	1004	3414	14	1	13
10	10	1004	3924	19	1	54
11	11	1004	3419	14	1	68
12	12	1004	3907	19	1	70
13	13	1005	3002	10	1	16
14	14	1005	3806	18	1	63
15	15	1006	3705	17	1	85
16	16	1007	3512	15	1	33
17	17	1007	3509	15	1	39
18	18	1007	4005	20	1	90
19	19	1008	2302	3	1	81
20	20	1009	2716	7	1	16
21	21	1009	3803	18	2	45
22	22	1010	2943	9	1	82
23	23	1010	2809	8	1	88
2/	24	1010	2802	8	1	90

SELECT * FROM colour



SELECT * FROM venues



SELECT * FROM positions



Create

Matchlist

SELECT m.id, date, time, g.name AS gameweek, v.name AS venue, t1.name AS Team1, t2.name AS Team2
FROM match m
JOIN gameweek g
ON m.gameweek_id = g.id
JOIN venues v
ON m.venue_id = v.id
JOIN teams t1
ON m.hometeam_id = t1.id
JOIN teams t2
ON m.awayteam_id = t2.id
ORDER BY m.id (247 records)

	id	date	time	gameweek	venue	Team1	Team2
1	1001	2020-09-12	12:30:00.0000000	Gameweek 1	Craven Cottage	Fulham	Arsenal
2	1002	2020-09-12	15:00:00.0000000	Gameweek 1	Selhurst Park	Crystal Palace	Southampton
3	1003	2020-09-12	17:30:00.0000000	Gameweek 1	Anfield	Liverpool	Leeds United
4	1004	2020-09-12	20:00:00.0000000	Gameweek 1	London Stadium	West Ham United	Newcastle United
5	1005	2020-09-13	14:00:00.0000000	Gameweek 1	The Hawthorns	West Bromwich Albion	Leicester City
6	1006	2020-09-13	16:30:00.0000000	Gameweek 1	Tottenham Hotspur Stadium	Tottenham Hotspur	Everton
7	1007	2020-09-14	18:00:00.0000000	Gameweek 1	Bramall Lane	Sheffield United	Wolverhampton Wanderers
8	1008	2020-09-14	20:15:00.0000000	Gameweek 1	Amex Stadium	Brighton & Hove Albion	Chelsea
9	1009	2020-09-19	12:30:00.0000000	Gameweek 2	Goodison Park	Everton	West Bromwich Albion
10	1010	2020-09-19	15:00:00.0000000	Gameweek 2	Elland Road	Leeds United	Fulham
11	1011	2020-09-19	17:30:00.0000000	Gameweek 2	Old Trafford	Manchester United	Crystal Palace
12	1012	2020-09-19	20:00:00.0000000	Gameweek 2	Emirates Stadium	Arsenal	West Ham United
13	1013	2020-09-20	12:00:00.0000000	Gameweek 2	St Mary's Stadium	Southampton	Tottenham Hotspur
14	1014	2020-09-20	14:00:00.0000000	Gameweek 2	St James' Park	Newcastle United	Brighton & Hove Albion
15	1015	2020-09-20	16:30:00.0000000	Gameweek 2	Stamford Bridge	Chelsea	Liverpool
16	1016	2020-09-20	19:00:00.0000000	Gameweek 2	King Power Stadium	Leicester City	Burnley
17	1017	2020-09-21	18:00:00.0000000	Gameweek 2	Villa Park	Aston Villa	Sheffield United
18	1018	2020-09-21	20:15:00.0000000	Gameweek 2	Molineux	Wolverhampton Wanderers	Manchester City
19	1019	2020-09-26	12:30:00.0000000	Gameweek 3	Amex Stadium	Brighton & Hove Albion	Manchester United
20	1020	2020-09-26	15:00:00.00000000	Gameweek 3	Selhurst Park	Crystal Palace	Everton
21	1021	2020-09-26	17:30:00.0000000	Gameweek 3	The Hawthorns	West Bromwich Albion	Chelsea
22	1022	2020-09-26	20:00:00.0000000	Gameweek 3	Turf Moor	Burnley	Southampton
23	1023	2020-09-27	12:00:00.0000000	Gameweek 3	Bramall Lane	Sheffield United	Leeds United
24	1024	2020-00-27	14-00-00 0000000	Gamawaak 3	Tottenham Hotenur Stadium	Tottenham Hotenur	Nauroetla Unitad

PL scores

SELECT s.match_id, date, time, g.name AS gameweek, v.name AS venue, t1.name AS Team1, t2.name AS Team2, hometeam_goal, awayteam_goal FROM scores s
JOIN match m
ON s.match_id = m.id
JOIN gameweek g
ON s.gameweek_id = g.id
JOIN venues v
ON s.venue_id = v.id
JOIN teams t1
ON s.hometeam_id = t1.id
JOIN teams t2
ON s.awayteam_id = t2.id
ORDER BY s.match_id

	match_id	date	time	gameweek	venue	Team1	Team2	hometeam_goal	awayteam_goa
	1001	2020-09-12	12:30:00.0000000	Gameweek 1	Craven Cottage	Fulham	Arsenal	0	3
2	1002	2020-09-12	15:00:00.0000000	Gameweek 1	Selhurst Park	Crystal Palace	Southampton	1	0
3	1003	2020-09-12	17:30:00.0000000	Gameweek 1	Anfield	Liverpool	Leeds United	4	3
1	1004	2020-09-12	20:00:00.0000000	Gameweek 1	London Stadium	West Ham United	Newcastle United	0	2
5	1005	2020-09-13	14:00:00.0000000	Gameweek 1	The Hawthorns	West Bromwich Albion	Leicester City	0	3
3	1006	2020-09-13	16:30:00.0000000	Gameweek 1	Tottenham Hotspur Stadium	Tottenham Hotspur	Everton	0	1
7	1007	2020-09-14	18:00:00.0000000	Gameweek 1	Bramall Lane	Sheffield United	Wolverhampton Wanderers	0	2
3	1008	2020-09-14	20:15:00.0000000	Gameweek 1	Amex Stadium	Brighton & Hove Albion	Chelsea	1	3
)	1009	2020-09-19	12:30:00.0000000	Gameweek 2	Goodison Park	Everton	West Bromwich Albion	5	2
10	1010	2020-09-19	15:00:00.0000000	Gameweek 2	Elland Road	Leeds United	Fulham	4	3
11	1011	2020-09-19	17:30:00.0000000	Gameweek 2	Old Trafford	Manchester United	Crystal Palace	1	3
12	1012	2020-09-19	20:00:00.0000000	Gameweek 2	Emirates Stadium	Arsenal	West Ham United	2	1
13	1013	2020-09-20	12:00:00.0000000	Gameweek 2	St Mary's Stadium	Southampton	Tottenham Hotspur	2	5
14	1014	2020-09-20	14:00:00.0000000	Gameweek 2	St James' Park	Newcastle United	Brighton & Hove Albion	0	3
15	1015	2020-09-20	16:30:00.0000000	Gameweek 2	Stamford Bridge	Chelsea	Liverpool	0	2
16	1016	2020-09-20	19:00:00.0000000	Gameweek 2	King Power Stadium	Leicester City	Burnley	4	2
17	1017	2020-09-21	18:00:00.0000000	Gameweek 2	Villa Park	Aston Villa	Sheffield United	1	0
18	1018	2020-09-21	20:15:00.0000000	Gameweek 2	Molineux	Wolverhampton Wanderers	Manchester City	1	3
19	1019	2020-09-26	12:30:00.0000000	Gameweek 3	Amex Stadium	Brighton & Hove Albion	Manchester United	2	3
20	1020	2020-09-26	15:00:00.0000000	Gameweek 3	Selhurst Park	Crystal Palace	Everton	1	2
21	1021	2020-09-26	17:30:00.0000000	Gameweek 3	The Hawthorns	West Bromwich Albion	Chelsea	3	3
22	1022	2020-09-26	20:00:00.0000000	Gameweek 3	Turf Moor	Burnley	Southampton	0	1
23	1023	2020-09-27	12:00:00.0000000	Gameweek 3	Bramall Lane	Sheffield United	Leeds United	0	1
2.4	1024	2020-00-27	1.4-00-00 0000000	Gamawaak 3	Tottenham Hotenur Stadium	Tottenham Hotenur	Namastla I Inited	1	1

WHERE FUNCTIONS

-- Scores from the first matchday SELECT * FROM scores WHERE gameweek_id = 1

	match_id	gameweek_id	venue_id	hometeam_id	awayteam_id	hometeam_goal	awayteam_goal
1	1001	1	8	8	1	0	3
2	1002	1	6	6	16	1	0
3	1003	1	11	11	9	4	3
1	1004	1	19	19	14	0	2
5	1005	1	18	18	10	0	3
3	1006	1	17	17	7	0	1
7	1007	1	15	15	20	0	2
3	1008	1	3	3	5	1	3

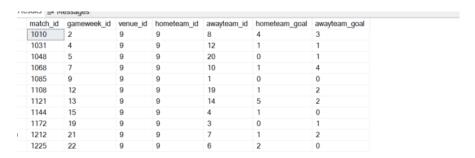
-- Scores from first 10 gameweeks

SELECT * FROM scores
WHERE gameweek_id BETWEEN 1 AND 10

	match_id	gameweek_id	venue_id	hometeam_id	awayteam_id	hometeam_goal	awayteam_goal
1	1001	1	8	8	1	0	3
2	1002	1	6	6	16	1	0
3	1003	1	11	11	9	4	3
4	1004	1	19	19	14	0	2
5	1005	1	18	18	10	0	3
6	1006	1	17	17	7	0	1
7	1007	1	15	15	20	0	2
8	1008	1	3	3	5	1	3
9	1009	2	7	7	18	5	2
10	1010	2	9	9	8	4	3
11	1011	2	13	13	6	1	3
12	1012	2	1	1	19	2	1
13	1013	2	16	16	17	2	5
14	1014	2	14	14	3	0	3
15	1015	2	5	5	11	0	2
16	1016	2	10	10	4	4	2
17	1017	2	2	2	15	1	0
18	1018	2	20	20	12	1	3
19	1019	3	3	3	13	2	3
20	1020	3	6	6	7	1	2
21	1021	3	18	18	5	3	3
22	1022	3	4	4	16	0	1
23	1023	3	15	15	9	0	1
2A	1024	3	17	17	1/	1	1

-- Scores that took place at Elland Road

SELECT * FROM scores WHERE venue_id= 9



-- Matches that took place within the Christmas and New Year

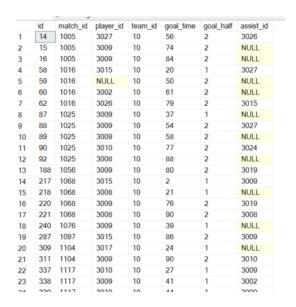
SELECT * FROM match

WHERE gameweek_id = 15 OR gameweek_id = 16

	id	date	time	gameweek_id	venue_id	hometeam_id	awayteam_id
1	1138	2020-12-26	12:30:00.0000000	15	10	10	13
2	1139	2020-12-26	15:00:00.0000000	15	2	2	6
3	1140	2020-12-26	15:00:00.0000000	15	8	8	16
4	1141	2020-12-26	17:30:00.0000000	15	1	1	5
5	1142	2020-12-26	20:00:00.0000000	15	12	12	14
6	1143	2020-12-26	20:00:00.0000000	15	15	15	7
7	1144	2020-12-27	12:00:00.0000000	15	9	9	4
8	1145	2020-12-27	14:15:00.0000000	15	19	19	3
9	1146	2020-12-27	16:30:00.0000000	15	11	11	18
10	1147	2020-12-27	19:15:00.0000000	15	20	20	17
11	1148	2020-12-28	15:00:00.0000000	16	6	6	10
12	1149	2020-12-28	17:30:00.0000000	16	5	5	2
13	1150	2020-12-29	18:00:00.0000000	16	3	3	1
14	1151	2020-12-29	18:00:00.0000000	16	4	4	15
15	1152	2020-12-29	18:00:00.0000000	16	16	16	19
16	1153	2020-12-29	18:00:00.0000000	16	18	18	9
17	1154	2020-12-29	20:00:00.0000000	16	13	13	20
18	1155	2020-12-30	20:00:00.0000000	16	14	14	11

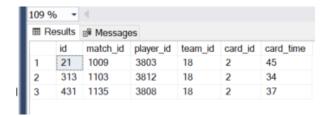
-- Goals and Assists from Leicester City

SELECT * FROM goals WHERE team_id = 10



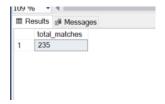
--Red Cards from West Bromwich Albion

SELECT * FROM cards WHERE team_id = 18 AND card id = 2



AGGREGATE FUNCTIONS COUNT

-- Number of matches since in the Premier League so far (09/01/2021) SELECT COUNT(match_id) AS total_matches FROM scores



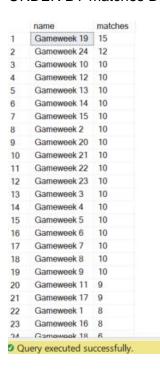
-- Number of matches taken place each stadium

SELECT v.name, COUNT(*) AS matches FROM scores JOIN venues AS v ON scores.venue_id = v.id GROUP BY v.name ORDER BY matches DESC

	name	matches
1	Old Trafford	13
2	Selhurst Park	12
3	St Mary's Stadium	12
1	Stamford Bridge	12
5	The Hawthorns	12
3	Tottenham Hotspur Stadium	12
7	Amex Stadium	12
3	Anfield	12
9	Bramall Lane	12
10	Craven Cottage	12
11	Emirates Stadium	12
12	Etihad Stadium	12
13	King Power Stadium	12
14	London Stadium	12
15	Molineux	12
16	Goodison Park	11
17	Elland Road	11
18	Turf Moor	11
19	St James' Park	11
50	Villa Park	10

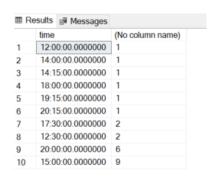
-- Number of matches per gameweek

SELECT gameweek.name, COUNT(*) AS matches FROM scores JOIN gameweek ON scores.gameweek_id = gameweek.id GROUP BY gameweek.name ORDER BY matches DESC, gameweek.name



--What times do Crystal Palace play and how many times? (As up to 20/02/21)

SELECT time, COUNT(*)
FROM match
WHERE hometeam_id = 6
OR awayteam_id = 6
GROUP BY time
ORDER BY COUNT(*)



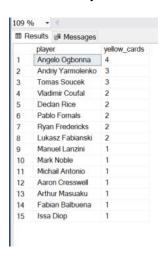
--Top 10 Assist makers in the 2020-21 season (As up to 20/02/21)

SELECT p.name AS player, COUNT(*) AS assists FROM goals g
JOIN players p
ON g.assist_id = p.id
GROUP BY p.name
ORDER BY assists DESC
LIMIT 10



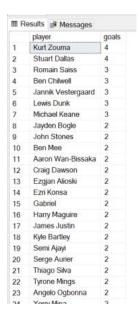
--Number of yellow cards given to West Ham (As up to 20/02/21)

SELECT p.name AS player, COUNT(*) AS yellow_cards FROM cards c
JOIN players p
ON c.player_id = p.id
WHERE c.team_id = 19
AND card_id = 1
GROUP BY p.name
ORDER BY yellow_cards DESC



--Number of goals scored by defenders (As up to 20/02/21)

SELECT p.name AS player, COUNT(*) AS goals FROM goals g
JOIN players p ON g.player_id = p.id
WHERE position_id = 2
GROUP BY p.name
ORDER BY goals DESC (61 records)



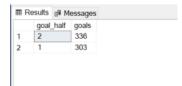
--Number of strikers getting red cards (As up to 20/02/21)

SELECT p.name AS player, COUNT(*) AS red_cards FROM cards c
JOIN players p
ON c.player_id = p.id
WHERE position_id = 4
AND card_id = 2
GROUP BY p.name
ORDER BY red_cards DESC



--Total Number of goals scored in the each half (As up to 20/02/21)

SELECT g.goal_half, COUNT(*) AS goals FROM goals g GROUP BY goal_half ORDER BY goals DESC



--Number of yellow cards given in the first half (As up to 20/02/21)

SELECT COUNT(*)
FROM cards c
WHERE card_time BETWEEN 1 AND 45



SUM

-- Number of goals scored so far in the Premier League

SELECT SUM(hometeam_goal + awayteam_goal) FROM scores



-- Number of goals scored in each gameweek

SELECT gameweek.name, SUM(hometeam_goal + awayteam_goal) AS total_goals FROM scores
JOIN gameweek
ON scores.gameweek_id = gameweek.id
GROUP BY gameweek.name
ORDER BY total_goals DESC, gameweek.name



--Number of goals scored in each stadium

SELECT venues.name, SUM(hometeam_goal + awayteam_goal) AS total_goals FROM scores
JOIN venues
ON scores.venue_id = venues.id

GROUP BY venues.name

ORDER BY total_goals DESC



--Number of goals scored in each stadium capacity less than 40,000 capacity

SELECT venues.name, SUM(hometeam_goal + awayteam_goal) AS total_goals

FROM scores

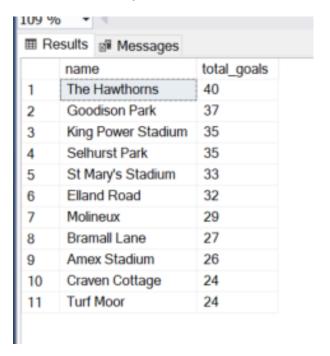
JOIN venues

ON scores.venue_id = venues.id

WHERE capacity < 40000

GROUP BY venues.name

ORDER BY total_goals DESC



--Number of goals scored in each stadium capacity of more than 40,000

SELECT venues.name, SUM(hometeam_goal + awayteam_goal) AS total_goals FROM scores
JOIN venues
ON scores.venue_id = venues.id
WHERE capacity > 40000
GROUP BY venues.name
ORDER BY total_goals DESC



MAX

-- Maximum number of goals scored in a single match at the PL season SELECT MAX(hometeam_goal + awayteam_goal) FROM scores



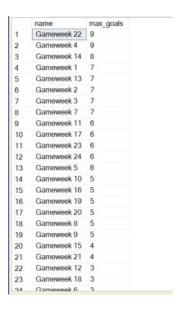
-- Maximum number of goals scored in a match per round

SELECT gameweek.name, MAX(hometeam_goal + awayteam_goal) AS max_goals FROM scores JOIN gameweek

ON scores.gameweek_id = gameweek.id

GROUP BY gameweek.name

ORDER BY max_goals DESC, gameweek.name



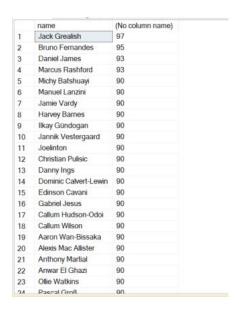
-- Maximum number of goals scored in a match per stadium

SELECT venues.name, MAX(hometeam_goal + awayteam_goal) AS max_goals FROM scores JOIN venues ON scores.venue_id = venues.id GROUP BY venues.name ORDER BY max_goals DESC



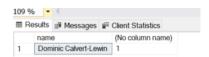
-- Top 50 goals scored at the latest time this season

SELECT p.name, MAX(goal_time)
FROM goals g
JOIN players p
ON g.player_id = p.id
GROUP BY p.name
ORDER BY MAX(goal_time) DESC
LIMIT 50



-- Earliest time goal scored this season

SELECT p.name, MIN(goal_time)
FROM goals g
JOIN players p
ON g.player_id = p.id
GROUP BY p.name
ORDER BY MIN(goal_time)
LIMIT 1



-- Earliest time card given this season

SELECT p.name, MIN(card_time)
FROM cards c
JOIN players p
ON c.player_id = p.id
GROUP BY p.name
ORDER BY MIN(card_time)
LIMIT 1



--Latest time card given this season

SELECT p.name, MAX(card_time)
FROM cards c
JOIN players p
ON c.player_id = p.id
GROUP BY p.name
ORDER BY MAX(card_time) DESC
LIMIT 1



UNION

--Displaying all matches and venues

SELECT gameweek_id, venue_id, hometeam_id, awayteam_id FROM match

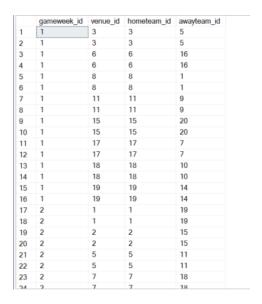
UNION

SELECT gameweek_id, venue_id, hometeam_id, awayteam_id FROM scores

ORDER BY gameweek_id, venue_id

	gameweek_id	venue_id	hometeam_id	awayteam_id
	1	3	3	5
	1	6	6	16
	1	8	8	1
	1	11	11	9
	1	15	15	20
	1	17	17	7
	1	18	18	10
	1	19	19	14
	2	1	1	19
)	2	2	2	15
1	2	5	5	11
2	2	7	7	18
3	2	9	9	8
	2	10	10	4
5	2	13	13	6
3	2	14	14	3
7	2	16	16	17
3	2	20	20	12
9	3	3	3	13
)	3	4	4	16
1	3	6	6	7
2	3	8	8	2
3	3	11	11	1
		40	40	40

SELECT gameweek_id, venue_id, hometeam_id, awayteam_id FROM match UNION ALL SELECT gameweek_id, venue_id, hometeam_id, awayteam_id FROM scores ORDER BY gameweek_id, venue_id

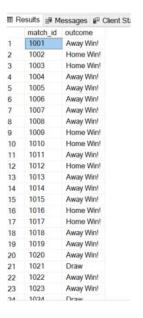


CASE STATEMENTS

--Identify home wins, losses or draw

SELECT match id.

CASE WHEN hometeam_goal > awayteam_goal THEN 'Home Win!'
WHEN hometeam_goal < awayteam_goal THEN 'Away Win!'
ELSE 'Draw' END AS outcome
FROM scores



--Select matches where Burney were home

SELECT s.match_id, t.name,

CASE WHEN hometeam_goal > awayteam_goal THEN 'Burnley Win'

WHEN hometeam_goal < awayteam_goal THEN 'Burnley loss!'

ELSE 'Draw' END AS Outcome

FROM scores s

JOIN teams t

ON s.awayteam_id = t.id

WHERE hometeam id = 4

	match_id	name	Outcome
1	1022	Southampton	Burnley loss!
2	1058	Tottenham Hotspur	Burnley loss!
3	1061	Chelsea	Burnley loss!
1	1087	Crystal Palace	Burnley Win
5	1099	Everton	Draw
5	1136	Wolverhampton Wanderers	Burnley Win
7	1151	Sheffield United	Burnley Win
3	1166	Manchester United	Burnley loss!
9	1190	Aston Villa	Burnley Win
10	1210	Manchester City	Burnley loss!
11	1217	Brighton & Hove Albion	Draw
12	1236	Fulham	Draw
13	1240	West Bromwich Albion	Draw

--Identify when Wolves won a match during the season

SELECT m.date, g.name, v.name,

CASE WHEN scores.hometeam_id = 20 AND hometeam_goal > awayteam_goal THEN 'Wolves win'

WHEN scores.awayteam_id = 20 AND awayteam_goal > hometeam_goal THEN 'Wolves win'

END AS outcome

FROM scores

JOIN match m

ON scores.match_id = m.id

JOIN gameweek g

ON scores.gameweek_id = g.id

JOIN venues v

ON scores.venue_id = v.id



--Sum the total records in each gameweek where the home teams won (1-7)

SELECT g.name AS Gameweek,

SUM(CASE WHEN gameweek_id = 1 AND hometeam_goal > awayteam_goal THEN 1 ELSE 0 END) AS Matchday_1,

SUM(CASE WHEN gameweek_id = 2 AND hometeam_goal > awayteam_goal THEN 1 ELSE 0 END) AS Matchday_2,

SUM(CASE WHEN gameweek_id = 3 AND hometeam_goal > awayteam_goal THEN 1 ELSE 0 END) AS Matchday_3,

SUM(CASE WHEN gameweek_id = 4 AND hometeam_goal > awayteam_goal THEN 1 ELSE 0 END) AS Matchday_4,

SUM(CASE WHEN gameweek_id = 5 AND hometeam_goal > awayteam_goal THEN 1 ELSE 0 END) AS Matchday_5,

SUM(CASE WHEN gameweek_id = 6 AND hometeam_goal > awayteam_goal THEN 1 ELSE 0 END) AS Matchday_6,

SUM(CASE WHEN gameweek_id = 7 AND hometeam_goal > awayteam_goal THEN 1 ELSE 0 END) AS Matchday_7

FROM scores

JOIN gameweek g

ON scores.gameweek_id = g.id

WHERE gameweek_id BETWEEN 1 AND 7

GROUP BY g.name

	Gameweek	Matchday_1	Matchday_2	Matchday_3	Matchday_4	Matchday_5	Matchday_6	Matchday_7
1	Gameweek 1	2	0	0	0	0	0	0
2	Gameweek 2	0	5	0	0	0	0	0
3	Gameweek 3	0	0	2	0	0	0	0
4	Gameweek 4	0	0	0	7	0	0	0
5	Gameweek 5	0	0	0	0	1	0	0
6	Gameweek 6	0	0	0	0	0	2	0
7	Gameweek 7	0	0	0	0	0	0	5

-- Count the Team1, Team2 and Draws in each Stadium

SELECT v.name AS venue,

COUNT(CASE WHEN hometeam_goal > awayteam_goal THEN s.match_id END) AS home_wins,

COUNT(CASE WHEN hometeam_goal < awayteam_goal THEN s.match_id END) AS away_wins,

COUNT(CASE WHEN hometeam_goal = awayteam_goal THEN s.match_id END) AS Draw FROM scores s

JOIN venues v

ON s.venue_id = v.id

GROUP BY v.name

ORDER BY home_wins DESC



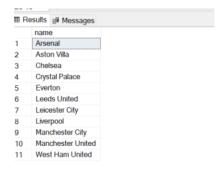
SUBQUERIES

-- Teams who scored 4 or more goals as Home

SELECT t.name

FROM teams t

WHERE t.id IN (SELECT hometeam_id FROM scores WHERE hometeam_goal >= 4)



-- Teams who scored 4 or more goals as Away

SELECT t.name

FROM teams t

WHERE t.id IN (SELECT awayteam_id FROM scores WHERE awayteam_goal >= 4)



--Matches where 5 or more goals were score in a match

SELECT date, hometeam_goal, awayteam_goal

FROM

(SELECT date, g.name, hometeam_goal, awayteam_goal, (hometeam_goal + awayteam_goal) AS total_goals

FROM scores

JOIN match m

ON scores.match_id = m.id

JOIN gameweek g

ON scores.gameweek_id = g.id) AS subq

WHERE total_goals >= 5



--Average total of goals per day vs. Overall AVG

SELECT g.name AS gameweek,

ROUND(AVG(hometeam_goal + awayteam_goal), 2) AS avg_goals,

(SELECT ROUND(AVG(hometeam_goal + awayteam_goal), 2)

FROM scores) AS Overall_avg

FROM scores

JOIN match AS m

ON scores.match_id = m.id

JOIN gameweek g

ON scores.gameweek_id = g.id

GROUP BY date, g.name

ORDER BY avg_goals DESC

	gameweek	avg_goals	Overall_avg
1	Gameweek 2	5.250000	2.700000
2	Gameweek 2	4.500000	2.700000
3	Gameweek 22	4.500000	2.700000
4	Gameweek 20	4.250000	2.700000
5	Gameweek 4	4.170000	2.700000
6	Gameweek 5	4.000000	2.700000
7	Gameweek 4	4.000000	2.700000
8	Gameweek 20	4.000000	2.700000
9	Gameweek 3	3.750000	2.700000
10	Gameweek 11	3.750000	2.700000
11	Gameweek 14	3.750000	2.700000
12	Gameweek 17	3.750000	2.700000
13	Gameweek 8	3.750000	2.700000
14	Gameweek 7	3.500000	2.700000
15	Gameweek 7	3.500000	2.700000
16	Gameweek 17	3.500000	2.700000
17	Gameweek 3	3.500000	2.700000
18	Gameweek 3	3.500000	2.700000
19	Gameweek 24	3.250000	2.700000
20	Gameweek 14	3.250000	2.700000
21	Gameweek 1	3.250000	2.700000
22	Gameweek 1	3.000000	2.700000
23	Gameweek 10	3.000000	2.700000
24	Gamawaak 11	3.000000	2 700000

--Average total of goals per gameweek vs Overall AVG

SELECT s.name AS gameweek,

ROUND(AVG(hometeam_goal + awayteam_goal), 2) AS avg_goals, (SELECT ROUND(AVG(hometeam_goal + awayteam_goal), 2)

FROM scores) AS Overall_avg

FROM scores

LEFT JOIN match AS m

ON scores.match_id = m.id

JOIN gameweek s

ON scores.gameweek_id = s.id

GROUP BY s.name

ORDER BY avg_goals DESC

	gameweek	avg_goals	Overall_avg
1	Gameweek 2	4.400000	2.700000
2	Gameweek 4	4.100000	2.700000
3	Gameweek 3	3.600000	2.700000
4	Gameweek 14	3.400000	2.700000
5	Gameweek 11	3.330000	2.700000
6	Gameweek 20	3.100000	2.700000
7	Gameweek 22	3.100000	2.700000
8	Gameweek 17	3.000000	2.700000
9	Gameweek 7	3.000000	2.700000
10	Gameweek 1	2.880000	2.700000
11	Gameweek 24	2.830000	2.700000
12	Gameweek 5	2.800000	2.700000
13	Gameweek 23	2.600000	2.700000
14	Gameweek 13	2.600000	2.700000
15	Gameweek 10	2.500000	2.700000
16	Gameweek 8	2.400000	2.700000
17	Gameweek 15	2.300000	2.700000
18	Gameweek 19	2.270000	2.700000
19	Gameweek 21	2.000000	2.700000
20	Gameweek 9	2.000000	2.700000
21	Gameweek 6	1.900000	2.700000
22	Gameweek 12	1.900000	2.700000
23	Gameweek 16	1.500000	2.700000
24	Сэтомоок 18	1.330000	2 700000

--Average total of goals per gameweek vs difference of overall AVG

SELECT g.name AS gameweek,

ROUND(AVG(hometeam_goal + awayteam_goal), 2) AS avg_goals,

ROUND(AVG(hometeam_goal + awayteam_goal) -

(SELECT AVG(hometeam_goal + awayteam_goal)

FROM scores), 2) AS diff

FROM scores

LEFT JOIN match AS m
ON scores.match_id = m.id
JOIN gameweek g
ON scores.gameweek_id = g.id
GROUP BY g.name

ORDER BY avg_goals DESC

	gameweek	avg_goals	diff
1	Gameweek 2	4.400000	1.700000
2	Gameweek 4	4.100000	1.400000
3	Gameweek 3	3.600000	0.900000
4	Gameweek 14	3.400000	0.700000
5	Gameweek 11	3.330000	0.640000
6	Gameweek 20	3.100000	0.400000
7	Gameweek 22	3.100000	0.400000
8	Gameweek 17	3.000000	0.300000
9	Gameweek 7	3.000000	0.300000
10	Gameweek 1	2.880000	0.180000
11	Gameweek 24	2.830000	0.140000
12	Gameweek 5	2.800000	0.100000
13	Gameweek 23	2.600000	-0.100000
14	Gameweek 13	2.600000	-0.100000
15	Gameweek 10	2.500000	-0.200000
16	Gameweek 8	2.400000	-0.300000
17	Gameweek 15	2.300000	-0.400000
18	Gameweek 19	2.270000	-0.430000
19	Gameweek 21	2.000000	-0.700000
20	Gameweek 9	2.000000	-0.700000
21	Gameweek 6	1.900000	-0.800000
22	Gameweek 12	1.900000	-0.800000
23	Gameweek 16	1.500000	-1.200000
0.4	O	1 222222	1 200000

--Gameweek where average goals > Overall AVG + Overall AVG SELECT

s.gameweek_id, ROUND(s.avg_goals, 2) AS AVG_goals,

(SELECT AVG(hometeam_goal + awayteam_goal) FROM scores) AS overall_AVG FROM

(SELECT gameweek_id, AVG(hometeam_goal + awayteam_goal) AS avg_goals FROM scores

GROUP BY gameweek_id) AS s

WHERE s.avg_goals > (SELECT AVG(hometeam_goal + awayteam_goal)
FROM scores)

	gameweek_id	hometeam_goal	awayteam_goal
1	1	4	3
2	4	7	2
3	5	3	3
	5	3	3
	7	3	4
	8	4	1
	8	4	1
	9	2	3
	13	5	2
)	14	0	7
1	14	6	2
2	16	0	5
3	18	1	2
4	19	2	3
5	22	9	0
3	23	3	3
7	24	4	2

--Correlated subquery (matches where goals > twice the AVG

SELECT

main.gameweek_id,

main.hometeam_goal,

main.awayteam_goal

FROM scores AS main

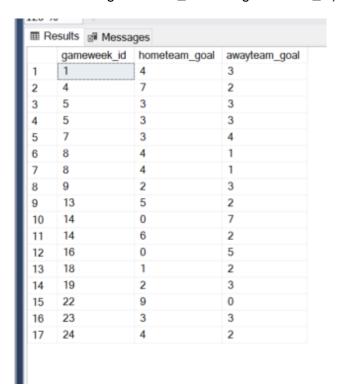
WHERE

(hometeam_goal + awayteam_goal) >

(SELECT AVG((sub.hometeam_goal + sub.awayteam_goal) * 2)

FROM scores AS sub

WHERE main.gameweek_id = sub.gameweek_id)



--Scores equal Max number of goals in a match

SELECT

main.match id,

main.gameweek id,

main.venue_id,

main.hometeam_goal,

main.awayteam_goal

FROM scores AS main

WHERE(hometeam_goal + awayteam_goal) =

(SELECT MAX(sub.hometeam_goal + sub.awayteam_goal)

FROM scores AS sub)

	match_id	gameweek_id	venue_id	hometeam_goal	awayteam_goal
1	1038	4	2	7	2
2	1208	22	13	9	0

--Scores equal Min number of goals in a match

SELECT
main.match_id,
main.gameweek_id,
main.venue_id,
main.hometeam_goal,
main.awayteam_goal
FROM scores AS main
WHERE(hometeam_goal + awayteam_goal) =
(SELECT MIN(sub.hometeam_goal + sub.awayteam_goal)
FROM scores AS sub)

	match_id	gameweek_id	venue_id	hometeam_goal	awayteam_goa
1	1047	5	18	0	0
2	1052	6	13	0	0
3	1069	8	3	0	0
4	1085	9	9	0	0
5	1095	10	5	0	0
6	1111	12	13	0	0
7	1123	13	8	0	0
8	1126	13	2	0	0
9	1140	15	8	0	0
10	1152	16	16	0	0
11	1155	16	14	0	0
12	1170	18	1	0	0
13	1177	19	11	0	0
14	1191	20	5	0	0
15	1192	20	3	0	0
16	1200	21	1	0	0
17	1219	23	8	0	0
18	1222	23	20	0	0
19	1229	24	3	0	0
20	1240	25	4	0	0

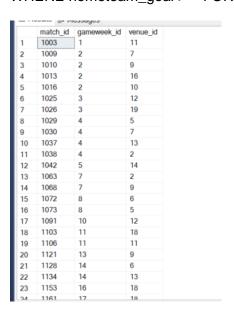
SELECT g.name, MAX(hometeam_goal + awayteam_goal) AS max_goals, (SELECT MAX(hometeam_goal + awayteam_goal) FROM scores) AS overall_max, (SELECT MAX (hometeam_goal + awayteam_goal) FROM scores
WHERE match_id IN (SELECT id FROM match WHERE EXTRACT(MONTH FROM date) = 12)) AS dec_max_goals
FROM scores s
JOIN gameweek AS g
ON s.gameweek_id = g.id
GROUP BY g.name

4	name character varying (15)	max_goals numeric	overall_max numeric	dec_max_goals numeric
1	Gameweek 21	4	9	8
2	Gameweek 22	9	9	8
3	Gameweek 2	7	9	8
4	Gameweek 23	6	9	8
5	Gameweek 13	7	9	8
6	Gameweek 24	6	9	8
7	Gameweek 6	3	9	8
8	Gameweek 8	5	9	8
9	Gameweek 25	2	9	8
10	Gameweek 17	6	9	8
11	Gameweek 14	8	9	8
12	Gameweek 16	5	9	8
13	Gameweek 1	7	9	8

--Matches where home or away score 4 or more goals SELECT id, gameweek_id, venue_id

FROM scores

WHERE hometeam_goal >= 4 OR awayteam_goal >= 4



--Which gameweek and venue did those matches take place with > 4 goals? SELECT

g.name AS gameweek, v.name AS venue, COUNT(subquery.match_id) AS matches FROM (

SELECT gameweek_id, venue_id, match_id

FROM scores

WHERE hometeam_goal >= 2 OR awayteam_goal >= 2) AS subquery

JOIN gameweek g

ON g.id = subquery.gameweek_id

JOIN venues v

ON v.id = subquery.venue_id

GROUP BY g.name, v.name

	=							
	gameweek	venue	matches					
1	Gameweek 1	Amex Stadium	1					
2	Gameweek 11	Amex Stadium	1					
3	Gameweek 17	Amex Stadium	1					
4	Gameweek 3	Amex Stadium	1					
5	Gameweek 1	Anfield	1					
6	Gameweek 11	Anfield	1					
7	Gameweek 13	Anfield	1					
8	Gameweek 23	Anfield	1					
9	Gameweek 25	Anfield	1					
10	Gameweek 3	Anfield	1					
11	Gameweek 6	Anfield	1					
12	Gameweek 7	Anfield	1					
13	Gameweek 9	Anfield	1					
14	Gameweek 1	Bramall Lane	1					
15	Gameweek 11	Bramall Lane	1					
16	Gameweek 13	Bramall Lane	1					
17	Gameweek 19	Bramall Lane	1					
18	Gameweek 22	Bramall Lane	1					
19	Gameweek 23	Bramall Lane	1					
20	Gameweek 1	Craven Cottage	1					
21	Gameweek 19	Craven Cottage	1					
22	Gameweek 22	Craven Cottage	1					
23	Gameweek 3	Craven Cottage	1					
24	Gamowook 6	Craven Cottage	1					

--Venues where the top 5 earliest timed goals took place

SELECT v.name, sub.min_goal_time
FROM scores s
JOIN venues v
ON s.venue_id = v.id,
(SELECT match_id, p.name, MIN(goal_time) AS min_goal_time
FROM goals g
JOIN players p
ON g.player_id = p.id
GROUP BY match_id, p.name
ORDER BY min_goal_time
LIMIT 5) AS sub
WHERE s.match_id = sub.match_id

Dat	ta Output	Explain	Mess	ages	Notific	ations	
4	name character v	arying (50)	<u></u>	min_go integer	pal_time	•	
1	Tottenham	Hotspur Stac	dium			1	
2	Craven Cott	age				1	
3	St James' P	ark				1	
4	Molineux					1	
5	St James' P	ark				2	

--Venues where the 10 earliest yellow cards are given

SELECT v.name, sub.yellow_cards

FROM scores s

JOIN venues v

ON s.venue_id = v.id,

(SELECT match_id, p.name, MIN(card_time) AS yellow_cards

FROM cards c

JOIN players p

ON c.player_id = p.id

GROUP BY match_id, p.name

ORDER BY yellow_cards ASC

LIMIT 10) AS sub

WHERE s.match_id = sub.match_id

ORDER BY sub.yellow_cards

	corpor Express moood	.g
4	name character varying (50)	max_goal_time integer
1	Villa Park	97
2	Amex Stadium	95
3	St James' Park	93
4	Old Trafford	93
5	Craven Cottage	90
6	Villa Park	90
7	Elland Road	90
8	St Mary's Stadium	90
9	Amex Stadium	90
10	St Mary's Stadium	90
11	Molineux	90
12	Anfield	90
13	Old Trafford	90

--10 latest yellow cards were given in which venues?

SELECT v.name, sub.yellow_cards
FROM scores s
JOIN venues v
ON s.venue_id = v.id,
(SELECT match_id, p.name, MAX(card_time) AS yellow_cards
FROM cards c
JOIN players p
ON c.player_id = p.id
GROUP BY match_id, p.name
ORDER BY yellow_cards DESC
LIMIT 10) AS sub
WHERE s.match_id = sub.match_id
ORDER BY sub.yellow_cards DESC

4	name character varying (50) □	yellow_cards integer	<u></u>
1	Craven Cottage		97
2	Villa Park		96
3	Etihad Stadium		95
4	Bramall Lane		95
5	Bramall Lane		95
6	Bramall Lane		95
7	Amex Stadium		94
8	Bramall Lane		94
9	Villa Park		93
10	Goodison Park		93

--Full scoresheet using a Subquery

SELECT m.date, team1, team2, hometeam_goal, awayteam_goal

FROM scores s

JOIN match m

ON s.match_id = m.id

LEFT JOIN (

SELECT match.id, t.name AS team1

FROM match

JOIN teams t

ON match.hometeam_id = t.id) AS team1

ON team1.id = s.match_id

LEFT JOIN (

SELECT match.id, t.name AS team2

FROM match

JOIN teams t

ON match.awayteam_id = t.id) AS team2

ON team2.id = s.match_id

ORDER BY date

date	team1	team2	hometeam goal	awayteam goal
2020-01-01	Manchester United	Aston Villa	2	1
2020-01-02	Tottenham Hotspur	Leeds United	3	0
2020-01-02	Crystal Palace	Sheffield United	2	0
2020-01-02	Brighton & Hove Albion	Wolverhampton Wanderers	3	3
2020-01-02	West Bromwich Albion	Arsenal	0	4
2020-01-03	Newcastle United	Leicester City	1	2
2020-01-03	Chelsea	Manchester City	1	3
2020-01-04	Southampton	Liverpool	1	0
2020-01-12	Sheffield United	Newcastle United	1	0
2020-01-12	Burnley	Manchester United	0	1
2020-01-12	Wolverhampton Wanderers	Everton	1	2
2020-01-13	Manchester City	Brighton & Hove Albion	1	0
2020-01-13	Tottenham Hotspur	Fulham	1	1
2020-01-14	Arsenal	Crystal Palace	0	0
2020-01-16	Wolverhampton Wanderers	West Bromwich Albion	2	3
2020-01-16	Leeds United	Brighton & Hove Albion	0	1
2020-01-16	West Ham United	Burnley	1	0
2020-01-16	Fulham	Chelsea	0	1
2020-01-16	Leicester City	Southampton	2	0
2020-01-17	Sheffield United	Tottenham Hotspur	1	3
2020-01-17	Liverpool	Manchester United	0	0
2020-01-17	Manchester City	Crystal Palace	4	0
2020-01-18	Arsenal	Newcastle United	3	0
2022 24 40	March I I am I I mile of	Mart Describe Albies	0	4

--Full scoresheet using a correlated subquery

SELECT m.date, team1, team2, hometeam_goal, awayteam_goal

FROM scores s

JOIN match m

ON s.match_id = m.id

LEFT JOIN (

SELECT match.id, t.name AS team1

FROM match

JOIN teams t

ON match.hometeam_id = t.id) AS team1

ON team1.id = s.match_id

LEFT JOIN (

SELECT match.id, t.name AS team2

FROM match

JOIN teams t

ON match.awayteam_id = t.id) AS team2

ON team2.id = s.match_id

ORDER BY date

	date	team1	team2	hometeam_goal	awayteam_goal
1	2020-01-01	Manchester United	Aston Villa	2	1
2	2020-01-02	Tottenham Hotspur	Leeds United	3	0
3	2020-01-02	Crystal Palace	Sheffield United	2	0
4	2020-01-02	Brighton & Hove Albion	Wolverhampton Wanderers	3	3
5	2020-01-02	West Bromwich Albion	Arsenal	0	4
6	2020-01-03	Newcastle United	Leicester City	1	2
7	2020-01-03	Chelsea	Manchester City	1	3
8	2020-01-04	Southampton	Liverpool	1	0
9	2020-01-12	Sheffield United	Newcastle United	1	0
10	2020-01-12	Burnley	Manchester United	0	1
11	2020-01-12	Wolverhampton Wanderers	Everton	1	2
12	2020-01-13	Manchester City	Brighton & Hove Albion	1	0
13	2020-01-13	Tottenham Hotspur	Fulham	1	1
14	2020-01-14	Arsenal	Crystal Palace	0	0
15	2020-01-16	Wolverhampton Wanderers	West Bromwich Albion	2	3
16	2020-01-16	Leeds United	Brighton & Hove Albion	0	1
17	2020-01-16	West Ham United	Burnley	1	0
18	2020-01-16	Fulham	Chelsea	0	1
19	2020-01-16	Leicester City	Southampton	2	0
20	2020-01-17	Sheffield United	Tottenham Hotspur	1	3
21	2020-01-17	Liverpool	Manchester United	0	0
22	2020-01-17	Manchester City	Crystal Palace	4	0
23	2020-01-18	Arsenal	Newcastle United	3	0
24	2020-01-10	Wast Ham United	West Bromwich Albion	2	1

COMMON TABLE EXPRESSIONS

--Number of games per gameweek where total goals are more than / equal to 6 WITH match_list AS (
SELECT
m.match_id FROM scores m
WHERE (hometeam_goal + awayteam_goal) >= 6)
SELECT g.name AS gameweek, COUNT(match_list.match_id) AS matches
FROM scores
JOIN gameweek AS g
ON scores.gameweek_id = g.id
LEFT JOIN match_list ON scores.match_id = match_list.match_id
GROUP BY g.name



ORDER BY matches DESC

--Matches where 4 or more goals were scored

WITH match_list AS (

SELECT

scores.gameweek_id, m.date, hometeam_goal, awayteam_goal, (hometeam_goal + awayteam_goal) AS total_goals

FROM scores

LEFT JOIN match m ON scores.match_id = m.id)

SELECT gameweek_id, date, hometeam_goal, awayteam_goal FROM match_list WHERE total_goals >= 4

	gameweek_id	date	hometeam_goal	awayteam_goal
1	1	2020-09-12	4	3
2	1	2020-09-14	1	3
3	2	2020-09-19	5	2
4	2	2020-09-19	4	3
5	2	2020-09-19	1	3
6	2	2020-09-20	2	5
7	2	2020-09-20	4	2
8	2	2020-09-21	1	3
9	3	2020-09-26	2	3
10	3	2020-09-26	3	3
11	3	2020-09-27	2	5
12	3	2020-09-27	4	0
13	3	2020-09-28	3	1
14	4	2020-10-03	4	0
15	4	2020-10-03	4	2
16	4	2020-10-03	3	1
17	4	2020-10-04	1	6
18	4	2020-10-04	7	2
19	5	2020-10-17	2	2
20	5	2020-10-17	3	3
21	5	2020-10-17	1	4
22	5	2020-10-18	3	3
23	7	2020-11-01	3	4
24	7	2020 11 02	1	A

--Number of goals scored on AVG per venue in January

WITH match_list AS (

SELECT

venue_id, (hometeam_goal + awayteam_goal) AS goals

FROM scores

WHERE match_id IN (SELECT id FROM match

WHERE EXTRACT(MONTH FROM date) = 01))

SELECT v.name, AVG(match_list.goals)

FROM venues v

LEFT JOIN match_list

ON v.id = match_list.venue_id

GROUP BY v.name

ORDER BY avg DESC

4	name character varying (50) □	avg numeric
1	The Hawthorns	4.33333333333333333
2	Molineux	4.0000000000000000
3	Tottenham Hotspur Stadium	3.0000000000000000000000000000000000000
4	Old Trafford	3.0000000000000000000000000000000000000
5	Turf Moor	3.0000000000000000000000000000000000000
6	St James' Park	3.0000000000000000000000000000000000000
7	Selhurst Park	2.66666666666666
8	King Power Stadium	2.66666666666666
9	London Stadium	2.666666666666666
10	Bramall Lane	2.5000000000000000
1	Amex Stadium	2.33333333333333333
12	Craven Cottage	2.0000000000000000
3	Etihad Stadium	2.0000000000000000000000000000000000000
14	St Mary's Stadium	2 00000000000000

--Full scoresheet using CTE

WITH team1 AS (

SELECT s.match_id, m.date, t.name AS team1, s.hometeam_goal

FROM scores s

LEFT JOIN teams t

ON t.id = s.hometeam_id

LEFT JOIN match m

ON s.match_id = m.id),

team2 AS (

SELECT s.match_id, m.date, t.name AS team2, s.awayteam_goal

FROM scores s

LEFT JOIN teams t

ON t.id = s.awayteam_id

LEFT JOIN match m

On s.match_id = m.id)

SELECT team1.date, team1.team1, team2.team2, team1.hometeam_goal,

team2.awayteam_goal

FROM team1

JOIN team2

On team1.match_id = team2.match_id

ORDER BY date

_		J			
date		team1	team2	hometeam_goal	awayteam_goal
2021-0	2-06	Fulham	West Ham United	0	0
2021-0	2-06	Manchester United	Everton	3	3
2021-0	2-07	Tottenham Hotspur	West Bromwich Albion	2	0
2021-0	2-07	Wolverhampton Wanderers	Leicester City	0	0
2021-0	2-07	Liverpool	Manchester City	1	4
2021-0	2-07	Sheffield United	Chelsea	1	2
2021-0	2-08	Leeds United	Crystal Palace	2	0
2021-0	2-13	Leicester City	Liverpool	3	1
2021-0	2-13	Crystal Palace	Burnley	0	3
2021-0	2-13	Manchester City	Tottenham Hotspur	3	0
2021-0	2-13	Brighton & Hove Albion	Aston Villa	0	0
2021-0	2-14	Southampton	Wolverhampton Wanderers	1	2
2021-0	2-14	West Bromwich Albion	Manchester United	1	1
2021-0	2-14	Arsenal	Leeds United	4	2
2021-0	2-14	Everton	Fulham	0	2
2021-0	2-15	West Ham United	Sheffield United	3	0
2021-0	2-15	Chelsea	Newcastle United	2	0
2021-0	2-17	Burnley	Fulham	1	1
2021-0	2-17	Everton	Manchester City	1	3
2021-0	2-19	Wolverhampton Wanderers	Leeds United	1	0
2021-0	2-20	Southampton	Chelsea	1	1
2021-0	2-20	Burnley	West Bromwich Albion	0	0
2021-0	2-20	Liverpool	Everton	0	2
2021-0	2-20	Εινοιμουί	LYCITOTI	U	4

--Full Scoresheet for Chelsea this season

WITH home AS(

SELECT s.match_id, t.name,

CASE WHEN s.hometeam_goal > s.awayteam_goal THEN 'Chelsea Win'

WHEN s.hometeam_goal < s.awayteam_goal THEN 'Chelsea Lost'

ELSE 'Draw' END AS ChelseaPL

FROM scores s

LEFT JOIN teams t

ON s.hometeam_id = t.id),

away AS (

SELECT s.match_id, t.name,

CASE WHEN s.hometeam_goal > s.awayteam_goal THEN 'Chelsea Lost'

WHEN s.hometeam_goal < s.awayteam_goal THEN 'Chelsea Win'

ELSE 'Draw' END AS ChelseaPL

FROM scores s

LEFT JOIN teams t

ON s.awayteam_id = t.id)

SELECT DISTINCT m.date, home.name AS team1, away.name AS team2, hometeam_goal, awayteam_goal

FROM scores s

JOIN match m ON s.match_id = m.id

JOIN home ON s.match_id = home.match_id

JOIN away ON s.match id = away.match id

WHERE home.name = 'Chelsea' OR away.name = 'Chelsea'

date	team1	team2	hometeam_goal	awayteam_goa
2020-09-26	West Bromwich Albion	Chelsea	3	3
2020-10-03	Chelsea	Crystal Palace	4	0
2020-10-17	Chelsea	Southampton	3	3
2020-10-24	Manchester United	Chelsea	0	0
2020-10-31	Burnley	Chelsea	0	3
2020-11-07	Chelsea	Sheffield United	4	1
2020-11-21	Newcastle United	Chelsea	0	2
2020-11-29	Chelsea	Tottenham Hotspur	0	0
2020-12-05	Chelsea	Leeds United	3	1
2020-12-12	Everton	Chelsea	1	0
2020-12-15	Wolverhampton Wanderers	Chelsea	2	1
2020-12-21	Chelsea	West Ham United	3	0
2020-12-26	Arsenal	Chelsea	3	1
2020-12-28	Chelsea	Aston Villa	1	1
2021-01-03	Chelsea	Manchester City	1	3
2021-01-16	Fulham	Chelsea	0	1
2021-01-19	Leicester City	Chelsea	2	0
2021-01-27	Chelsea	Wolverhampton Wanderers	0	0
2021-01-31	Chelsea	Burnley	2	0
2021-02-04	Tottenham Hotspur	Chelsea	0	1
2021-02-07	Sheffield United	Chelsea	1	2
2021-02-15	Chelsea	Newcastle United	2	0
2021-02-20	Southampton	Chelsea	1	1

WINDOW FUNCTIONS

--Scorelist with the AVG

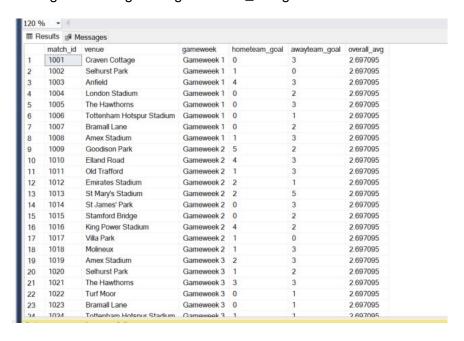
SELECT s.match_id, v.name AS venue, g.name AS gameweek, s.hometeam_goal, awayteam_goal,

AVG(hometeam_goal + awayteam_goal) OVER() AS overall_avg

FROM scores s

JOIN venues v ON s.venue_id = v.id

JOIN gameweek g ON s.gameweek_id = g.id



--Venue ranking on Average goals

SELECT v.name AS venue,

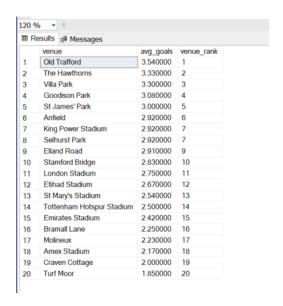
ROUND(AVG(hometeam_goal + awayteam_goal), 2) AS avg_goals,

RANK() OVER(ORDER BY AVG(hometeam_goal + awayteam_goal)DESC) AS venue_rank FROM venues v

JOIN scores ON v.id = scores.venue_id

GROUP BY v.name

ORDER BY venue rank



-- Gameweek ranking on Average goals

SELECT g.name AS gameweek,

ROUND(AVG(hometeam_goal + awayteam_goal), 2) AS avg_goals,

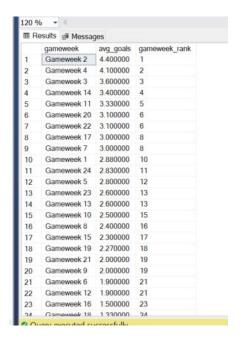
RANK() OVER(ORDER BY AVG(hometeam_goal + awayteam_goal)DESC) AS gameweek_rank

FROM gameweek g

JOIN scores ON g.id = scores.gameweek_id

GROUP BY g.name

ORDER BY gameweek_rank



-- Partitioning by a column

SELECT m.date, scores.venue_id, scores.hometeam_goal, scores.awayteam_goal, CASE WHEN scores.hometeam_id = 9 THEN 'home' ELSE 'away' END AS Leeds, AVG(hometeam_goal) OVER(PARTITION BY scores.venue_id) AS homeavg, AVG(awayteam_goal) OVER(PARTITION BY scores.venue_id) AS awayavg FROM scores
JOIN match m ON scores.match_id = m.id
JOIN gameweek g ON scores.gameweek_id = g.id
WHERE scores.hometeam_id = 9
OR scores.awayteam_id = 9
ORDER BY(hometeam_goal + awayteam_goal) DESC

	date	venue_id	hometeam_goal	awayteam_goal	Leeds	homeavg	awayavg
1	2020-12-20	13	6	2	away	6.000000	2.000000
2	2020-09-19	9	4	3	home	1.454545	1.454545
3	2020-12-16	9	5	2	home	1.454545	1.454545
4	2020-09-12	11	4	3	away	4.000000	3.000000
5	2021-02-14	1	4	2	away	4.000000	2.000000
6	2020-11-07	6	4	1	away	4.000000	1.000000
7	2020-11-02	9	1	4	home	1.454545	1.454545
8	2020-12-29	18	0	5	away	0.000000	5.000000
9	2021-01-31	10	1	3	away	1.000000	3.000000
10	2020-12-05	5	3	1	away	3.000000	1.000000
11	2020-12-11	9	1	2	home	1.454545	1.454545
12	2020-10-23	2	0	3	away	0.000000	3.000000
13	2021-01-26	14	1	2	away	1.000000	2.000000
14	2021-02-03	9	1	2	home	1.454545	1.454545
15	2021-01-02	17	3	0	away	3.000000	0.000000
16	2021-02-08	9	2	0	home	1.454545	1.454545
17	2020-10-03	9	1	1	home	1.454545	1.454545
18	2020-10-19	9	0	1	home	1.454545	1.454545
19	2021-01-16	9	0	1	home	1.454545	1.454545
20	2020-09-27	15	0	1	away	0.000000	1.000000
21	2020-11-28	7	0	1	away	0.000000	1.000000
22	2020-12-27	9	1	0	home	1.454545	1.454545
23	2021-02-19	20	1	0	away	1.000000	0.000000
		-	-	-	-		

--Assessing Running total of goals and AVG from Leicester when they are home SELECT m.date, scores.venue_id, scores.hometeam_goal, scores.awayteam_goal, CASE WHEN scores.hometeam_id = 10 THEN 'home' ELSE 'away' END AS Leicester, AVG(hometeam_goal) OVER(PARTITION BY scores.venue_id) AS homeavg, AVG(awayteam_goal) OVER(PARTITION BY scores.venue_id) AS awayavg FROM scores
JOIN match m ON scores.match_id = m.id
JOIN gameweek g ON scores.gameweek_id = g.id
WHERE scores.hometeam_id = 10
OR scores.awayteam_id = 10
ORDER BY(hometeam_goal + awayteam_goal) DESC

date	venue_id	hometeam_goal	awayteam_goal	Leicester	homeavg	awayavg
2020-09-27	12	2	5	away	2.000000	5.000000
2020-09-20	10	4	2	home	1.583333	1.333333
2020-11-02	9	1	4	away	1.000000	4.000000
2020-12-26	10	2	2	home	1.583333	1.333333
2021-02-13	10	3	1	home	1.583333	1.333333
2021-01-31	10	1	3	home	1.583333	1.333333
2020-10-04	10	0	3	home	1.583333	1.333333
2020-11-22	11	3	0	away	3.000000	0.000000
2020-11-30	10	1	2	home	1.583333	1.333333
2020-12-13	10	3	0	home	1.583333	1.333333
2021-01-03	13	1	2	away	1.000000	2.000000
2020-12-06	15	1	2	away	1.000000	2.000000
2020-09-13	18	0	3	away	0.000000	3.000000
2020-12-20	17	0	2	away	0.000000	2.000000
2020-12-16	10	0	2	home	1.583333	1.333333
2020-12-28	6	1	1	away	1.000000	1.000000
2021-01-27	7	1	1	away	1.000000	1.000000
2021-02-03	8	0	2	away	0.000000	2.000000
2021-01-16	10	2	0	home	1.583333	1.333333
2021-01-19	10	2	0	home	1.583333	1.333333
2020-10-25	1	0	1	away	0.000000	1.000000
2020-10-18	10	0	1	home	1.583333	1.333333
2020-11-08	10	1	0	home	1.583333	1.333333
2021-02-07	20	0	0	2M2M	0.000000	0.000000