--Series Tables
SELECT * FROM teams

id [PK] integer	name character varying (50)	coach character varying (50)
1	Australia	Justin Langer
2	India	Ravi Stastri

SELECT * FROM venues

id [PK] integer	name character varying (50)	city character varying (50)
1	Adelaide Oval	Adelaide
2	The Gabba	Brisbane
3	Manuka Oval	Canberra
4	Melbourne Cricket Ground	Melbourne
5	Sydney Cricket Ground	Sydney

SELECT * FROM formats

id [PK] integer	format character varying (10)
1	ODI
2	T20
3	Test

SELECT * FROM wickets

id [PK] integer	dismissal character varying (25)
1	Bowled
2	Caught
3	LBW
4	Run out
5	Stumped
6	Not out
7	Retired
8	Hit ball twice
9	Hit wicket
10	Obstruction
11	Timed out

SELECT * FROM roles

id [PK] integer	role character varying (25)
1	Batsman
2	Bowler
3	Wicket-keeper
4	Captain
5	All-rounder

SELECT * FROM players

	id [PK] integer	name character varying (50)	role_id integer	team_id integer
1	2101	Aaron Finch	4	1
2	2102	Tim Paine	4	1
3	2103	Sean Abbott	5	1
4	2104	Ashton Agar	5	1
5	2105	Joe Burns	1	1
6	2106	Alex Carey	3	1
7	2107	Pat Cummins	2	1
8	2108	Cameron Green	5	1
9	2109	Josh Hazlewood	2	1
10	2110	Travis Head	1	1
11	2111	Moises Henriques	5	1
12	2112	Marnus Labuschagne	1	1
13	2113	Nathan Lyon	2	1
14	2114	Glenn Maxwell	2	1

SELECT * FROM match

	id [PK] integer	start_date date	end_date date	format_id integer	venue_id integer	teama_id integer	teamb_id integer	winner integer	potm integer
1	1001	2020-11-27	2020-11-27	1	5	1	2	1	2120
2	1002	2020-11-29	2020-11-29	1	5	1	2	1	2120
3	1003	2020-12-02	2020-12-02	1	3	1	2	2	2213
4	1004	2020-12-04	2020-12-04	2	3	1	2	2	2205
5	1005	2020-12-06	2020-12-06	2	5	1	2	2	2213
6	1006	2020-12-08	2020-12-08	2	5	1	2	1	2123
7	1007	2020-12-17	2020-12-21	3	1	1	2	1	2102
8	1008	2020-12-26	2020-12-30	3	4	1	2	2	2216
9	1009	2021-01-07	2021-01-11	3	5	1	2	[null]	2120
10	1010	2021-01-15	2021-01-19	3	2	1	2	2	2214

SELECT * FROM matchruns (240 records)

	match_id integer	team_id integer	innings integer	player_id integer	runs integer	balls integer	fours integer	sixes integer	bowler_id integer	wicket_id integer	notes character varying (100)
1	1001	1	1	2125	69	76	6	0	2221	2	Caught by KL Rahul
2	1001	1	1	2101	114	124	9	2	2204	2	Caught by KL Rahul
3	1001	1	1	2120	105	66	11	4	2221	1	[null]
4	1001	1	1	2122	0	1	0	0	2205	2	Caught by KL Rahul
5	1001	1	1	2114	45	19	5	3	2221	2	Caught by Ravindra Jadeja
6	1001	1	1	2112	2	2	0	0	2219	2	Caught by Shikhar Dhawan
7	1001	1	1	2106	17	13	2	0	[null]	6	[null]
8	1001	1	1	2107	1	1	0	0	[null]	6	[null]
9	1001	1	1	2121	[null]	[null]	[null]	[null]	[null]	[null]	Innings close at 374-6
10	1001	1	1	2126	[null]	[null]	[null]	[null]	[null]	[null]	Innings close at 374-6
11	1001	1	1	2109	[null]	[null]	[null]	[null]	[null]	[null]	Innings close at 374-6
12	1001	1	1	[null]	21	[null]	[null]	[null]	[null]	[null]	[null]
13	1001	2	1	2202	22	18	2	1	2109	2	Caught by Glenn Maxwell
14	1001	2	1	2207	74	86	10	0	2126	2	Caught by Mitchell Starc

SELECT * FROM pots

	id [PK] integer	format_id integer	player_id integer
1	1	1	2213
2	2	2	2120
3	3	3	2107

--Scorecard
SELECT match_id, t.name, p1.name, runs, balls, fours, sixes, p2.name, w.dismissal, notes
FROM matchruns AS m
LEFT JOIN teams AS t
ON m.team_id = t.id
LEFT JOIN players AS p1
ON m.player_id = p1.id
LEFT JOIN players AS p2
ON m.bowler_id = p2.id
LEFT JOIN wickets AS w
ON m.wicket_id = w.id (240 records)

	match_id integer	name character varying (50)	name character varying (50)	runs integer	balls integer	fours integer	sixes integer	name character varying (50)	dismissal character varying (25)	notes character varying (100)
1	1001	Australia	David Warner	69	76	6	0	Mohammed Shami	Caught	Caught by KL Rahul
2	1001	Australia	Aaron Finch	114	124	9	2	Jasprit Bumrah	Caught	Caught by KL Rahul
3	1001	Australia	Steve Smith	105	66	11	4	Mohammed Shami	Bowled	[null]
4	1001	Australia	Marcus Stoinis	0	1	0	0	Yuzvendra Chahal	Caught	Caught by KL Rahul
5	1001	Australia	Glenn Maxwell	45	19	5	3	Mohammed Shami	Caught	Caught by Ravindra Jadeja
6	1001	Australia	Marnus Labuschagne	2	2	0	0	Navdeep Saini	Caught	Caught by Shikhar Dhawan
7	1001	Australia	Alex Carey	17	13	2	0	[null]	Not out	[null]
8	1001	Australia	Pat Cummins	1	1	0	0	[null]	Not out	[null]
9	1001	Australia	Mitchell Starc	[null]	[null]	[null]	[null]	[null]	[null]	Innings close at 374-6
10	1001	Australia	Adam Zampa	[null]	[null]	[null]	[null]	[null]	[null]	Innings close at 374-6
11	1001	Australia	Josh Hazlewood	[null]	[null]	[null]	[null]	[null]	[null]	Innings close at 374-6
12	1001	Australia	[null]	21	[null]	[null]	[null]	[null]	[null]	[null]
13	1001	India	Mayank Agarwal	22	18	2	1	Josh Hazlewood	Caught	Caught by Glenn Maxwell
14	1001	India	Shikhar Dhawan	74	86	10	0	Adam Zampa	Caught	✔ Successfully run. Total query runt
15	1001	India	Virat Kohli	21	21	2	1	Josh Hazlewood	Caught	Caught by Aaron Finch

--Matchlist
SELECT m.id, start_date, end_date, v.name AS venue, t1.name AS team1, t2.name AS team2, t3.name AS winner, p.name AS POTM
FROM match m
JOIN venues v
ON m.venue_id = v.id
JOIN teams t1
ON m.teama_id = t1.id
JOIN teams t2
ON m.teamb_id = t2.id
JOIN teams t3
ON m.winner = t3.id
JOIN players AS p
ON m.potm = p.id
ORDER BY m.id

```
29   SELECT p.name, COUNT(*) AS tournament_wickets
```
Data Output   Explain   Messages   Notifications

id integer	start_date date	end_date date	venue character varying (50)	team1 character varying (50)	team2 character varying (50)	winner character varying (50)	potm character varying (50)
1	1001 2020-11-27	2020-11-27	Sydney Cricket Ground	Australia	India	Australia	Steve Smith
2	1002 2020-11-29	2020-11-29	Sydney Cricket Ground	Australia	India	Australia	Steve Smith
3	1003 2020-12-02	2020-12-02	Manuka Oval	Australia	India	India	Hardik Pandya
4	1004 2020-12-04	2020-12-04	Manuka Oval	Australia	India	India	Yuzvendra Chahal
5	1005 2020-12-06	2020-12-06	Sydney Cricket Ground	Australia	India	India	Hardik Pandya
6	1006 2020-12-08	2020-12-08	Sydney Cricket Ground	Australia	India	Australia	Mitchell Swepson
7	1007 2020-12-17	2020-12-21	Adelaide Oval	Australia	India	Australia	Tim Paine
8	1008 2020-12-26	2020-12-30	Melbourne Cricket Ground	Australia	India	India	Ajinkya Rahane
9	1010 2021-01-15	2021-01-19	The Gabba	Australia	India	India	Rishabh Pant

--Most Wickets
SELECT p.name, COUNT(*) AS tournament_wickets
FROM matchruns m
JOIN players p
ON m.bowler_id = p.id
GROUP BY p.name
ORDER BY tournament_wickets DESC

	name character varying (50)	tournament_wickets bigint
1	Pat Cummins	13
2	Josh Hazlewood	13
3	Jasprit Bumrah	12
4	Mitchell Starc	11
5	Adam Zampa	10
6	Ravichandran Ashwin	10
7	Thangarasu Natarajan	8
8	Mitchell Swepson	5
9	Yuzvendra Chahal	5
0	Shardul Thakur	5
1	Mohammed Siraj	5
2	Moises Henriques	4
3	Ravindra Jadeja	4
4	Umesh Yadav	4
5	Nathan Lyon	4

--Most Runs
SELECT p.name, SUM(runs) AS tournament_runs
FROM matchruns m
JOIN players p
ON m.player_id = p.id
WHERE runs IS NOT NULL
GROUP BY p.name
ORDER BY tournament_runs DESC

	name character varying (50)	tournament_runs bigint
1	Virat Kohli	385
2	Steve Smith	308
3	Hardik Pandya	288
4	Aaron Finch	284
5	Matthew Wade	256
6	Glenn Maxwell	245
7	Ravindra Jadeja	216
8	Marnus Labuschagne	208
9	Shikhar Dhawan	201
10	Ajinkya Rahane	181
11	KL Rahul	174
12	David Warner	152
13	Shubman Gill	113
14	Cameron Green	89
15	Tim Paine	87

--Most Fours
SELECT p.name, SUM(fours) AS tournament_runs
FROM matchruns m
JOIN players p
ON m.player_id = p.id
WHERE runs IS NOT NULL
GROUP BY p.name
ORDER BY tournament_runs DESC

Data Output   Explain   Messages   Notifications

	name character varying (50)	tournament_runs bigint
1	Virat Kohli	30
2	Matthew Wade	29
3	Steve Smith	29
4	Aaron Finch	27
5	Shikhar Dhawan	24
6	Hardik Pandya	19
7	Ajinkya Rahane	18
8	Marnus Labuschagne	18
9	Shubman Gill	18
10	Glenn Maxwell	15
11	Ravindra Jadeja	14
12	David Warner	13
13	KL Rahul	12
14	Tim Paine	12
15	Mayank Agarwal	9

--Most Sixes
SELECT p.name, SUM(sixes) AS tournament_runs
FROM matchruns m
JOIN players p
ON m.player_id = p.id
WHERE runs IS NOT NULL
GROUP BY p.name
ORDER BY tournament_runs DESC, p.name

1	Glenn Maxwell	16
2	Hardik Pandya	11
3	Steve Smith	9
4	Virat Kohli	8
5	Aaron Finch	7
6	KL Rahul	7
7	Ravindra Jadeja	7
8	David Warner	3
9	Matthew Wade	3
10	Moises Henriques	2
11	Sanju Samson	2
12	Shardul Thakur	2
13	Shikhar Dhawan	2
14	Ajinkya Rahane	1
15	Cameron Green	1

--Number of matches played in each stadium
SELECT v.name, COUNT(*)
FROM match m
JOIN venues v
ON m.venue_id = v.id
GROUP BY v.name
ORDER BY COUNT(*) DESC

Data Output   Explain   Messages   Notifications

	name character varying (50)	count bigint
1	Sydney Cricket Ground	5
2	Manuka Oval	2
3	Melbourne Cricket Ground	1
4	The Gabba	1
5	Adelaide Oval	1

--Number of runs scored in the first game of the series
SELECT match_id, team_id, SUM(runs)
FROM matchruns
WHERE match_id = 1001
GROUP BY match_id, team_id
ORDER BY match_id

Data Output Explain Messages Notifications

	match_id integer	team_id integer	sum bigint
1	1001	1	374
2	1001	2	308

--Number of runs scored in all games of the series
SELECT match_id, t.name, SUM(runs)
FROM matchruns m
JOIN teams t
ON m.team_id = t.id
GROUP BY match_id, t.name
ORDER BY match_id

Data Output Explain Messages Notifications

	match_id integer	name character varying (50)	sum bigint
1	1001	Australia	374
2	1001	India	308
3	1002	Australia	389
4	1002	India	338
5	1003	Australia	289
6	1003	India	304
7	1004	Australia	150
8	1004	India	161
9	1005	Australia	194
10	1005	India	195
11	1006	Australia	186
12	1006	India	174
13	1007	Australia	284
14	1007	India	280
15	1008	Australia	395

--Matches that took place at Sydney
SELECT * FROM match
JOIN venues
ON match.venue_id = venues.id
WHERE name = 'Sydney Cricket Ground'

Data Output Explain Messages Notifications

	id integer	start_date date	end_date date	format_id integer	venue_id integer	teama_id integer	teamb_id integer	winner integer	potm integer	id integer	name character varying (50)	city character varying (50)
1	1001	2020-11-27	2020-11-27	1	5	1	2	1	2120	5	Sydney Cricket Ground	Sydney
2	1002	2020-11-29	2020-11-29	1	5	1	2	1	2120	5	Sydney Cricket Ground	Sydney
3	1005	2020-12-06	2020-12-06	2	5	1	2	2	2213	5	Sydney Cricket Ground	Sydney
4	1006	2020-12-08	2020-12-08	2	5	1	2	1	2123	5	Sydney Cricket Ground	Sydney
5	1009	2021-01-07	2021-01-11	3	5	1	2	[null]	2120	5	Sydney Cricket Ground	Sydney

--Which players were out via Bowled
SELECT * FROM matchruns
JOIN wickets
ON matchruns.wicket_id = wickets.id
WHERE dismissal = 'Bowled'

	match_id integer	team_id integer	innings integer	player_id integer	runs integer	balls integer	fours integer	sixes integer	bowler_id integer	wicket_id integer	notes character varying (100)	id integer	dismissal character varying (25)
1	1001	1	1	2120	105	66	11	4	2221	1	[null]	1	Bowled
2	1001	2	1	2221	13	10	1	1	2121	1	[null]	1	Bowled
3	1003	1	1	2112	7	13	1	0	2211	1	[null]	1	Bowled
4	1003	1	1	2114	59	38	3	4	2204	1	[null]	1	Bowled
5	1004	2	1	2207	1	6	0	0	2121	1	[null]	1	Bowled
6	1004	1	1	2121	1	2	0	0	2211	1	[null]	1	Bowled
7	1006	1	1	2120	24	23	1	0	2225	1	[null]	1	Bowled
8	1006	1	1	2114	54	36	3	3	2211	1	[null]	1	Bowled
9	1007	2	1	2223	0	2	0	0	2121	1	[null]	1	Bowled
10	1007	2	1	2202	17	40	2	0	2107	1	[null]	1	Bowled
11	1007	2	2	2223	4	4	0	0	2107	1	[null]	1	Bowled
12	1008	1	2	2120	8	30	0	0	2204	1	[null]	1	Bowled
13	1008	1	2	2109	10	21	0	0	2203	1	[null]	1	Bowled

✔ Successfully run. Total query runtime: 8

--Number of stumps/catches made by Virat Kohli
SELECT * FROM matchruns
WHERE notes LIKE '%Pant'

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Data Output   Explain   Messages   Notifications

	match_id integer	team_id integer	innings integer	player_id integer	runs integer	balls integer	fours integer	sixes integer	bowler_id integer	wicket_id integer	notes character varying (100)
1	1008	1	1	2105	0	10	0	0	2204	2	Caught by Rishabh Pant
2	1008	1	2	2105	4	10	0	0	2229	2	Caught by Rishabh Pant
3	1008	1	2	2102	1	9	0	0	2210	2	Caught by Rishabh Pant
4	1008	1	2	2113	3	15	0	0	2224	2	Caught by Rishabh Pant

AGGREGATE FUNCTIONS

COUNT

-- Players with the most wickets in the series
SELECT p.name, COUNT(*) AS wickets
FROM matchruns
JOIN players AS p
ON matchruns.bowler_id = p.id
GROUP BY p.name
ORDER BY wickets DESC

	name character varying (50)	wickets bigint
1	Pat Cummins	13
2	Josh Hazlewood	13
3	Jasprit Bumrah	12
4	Mitchell Starc	11
5	Adam Zampa	10
6	Ravichandran Ashwin	10
7	Thangarasu Natarajan	8
8	Mitchell Swepson	5
9	Yuzvendra Chahal	5
10	Shardul Thakur	5
11	Mohammed Siraj	5
12	Moises Henriques	4
13	Ravindra Jadeja	4
14	Umesh Yadav	4
15	Nathan Lyon	4

-- Players with the most wickets in Test
SELECT p.name, COUNT(*) AS wickets
FROM matchruns
JOIN players AS p
ON matchruns.bowler_id = p.id
WHERE match_id BETWEEN 1007 AND 1010
GROUP BY p.name
ORDER BY wickets DESC

	name character varying (50)	wickets bigint
1	Pat Cummins	10
2	Ravichandran Ashwin	10
3	Mitchell Starc	8
4	Jasprit Bumrah	8
5	Josh Hazlewood	7
6	Mohammed Siraj	5
7	Nathan Lyon	4
8	Umesh Yadav	4
9	Ravindra Jadeja	3

-- Players with the most wickets in ODI
SELECT p.name, COUNT(*) AS wickets
FROM matchruns
JOIN players AS p
ON matchruns.bowler_id = p.id
WHERE match_id BETWEEN 1001 AND 1003
GROUP BY p.name
ORDER BY wickets DESC

Data Output Explain Messages Notification

	name character varying (50)	wickets bigint
1	Adam Zampa	7
2	Josh Hazlewood	6
3	Jasprit Bumrah	4
4	Mohammed Shami	4
5	Shardul Thakur	3
6	Pat Cummins	3
7	Ashton Agar	2
8	Thangarasu Natarajan	2
9	Navdeep Saini	1
10	Hardik Pandya	1
11	Moises Henriques	1
12	Sean Abbott	1
13	Ravindra Jadeja	1
14	Glenn Maxwell	1
15	Mitchell Starc	1

-- Number of wins from each team
SELECT t.name, COUNT(*) AS wins
FROM match m
JOIN teams t
ON m.winner = t.id
GROUP BY t.name
ORDER BY wins DESC

Data Output Explain Messages Notificatio

	name character varying (50)	wins bigint
1	India	5
2	Australia	4

--Number of matches played by each player during the Series
SELECT p.name, COUNT(*) AS innings
FROM matchruns
JOIN players AS p
ON matchruns.player_id = p.id
GROUP BY p.name
ORDER BY innings DESC

	name character varying (50)	innings bigint
1	Steve Smith	10
2	Virat Kohli	8
3	Josh Hazlewood	8
4	Jasprit Bumrah	7
5	Matthew Wade	7
6	Mitchell Starc	7
7	Marnus Labuschagne	7
8	Adam Zampa	6
9	Hardik Pandya	6
10	Pat Cummins	6
11	Shikhar Dhawan	6
12	Glenn Maxwell	6
13	Ravindra Jadeja	6
14	Mayank Agarwal	6
15	KL Rahul	6

--Number of ducks made in the series
SELECT p.name, COUNT(*) AS ducks
FROM matchruns
JOIN players AS p
ON matchruns.player_id = p.id
WHERE runs= 0
AND wicket_id != 6
GROUP BY p.name
ORDER BY COUNT(*) DESC

	name character varying (50)	ducks bigint
1	Jasprit Bumrah	2
2	Shreyas Iyer	1
3	Ajinkya Rahane	1
4	Joe Burns	1
5	Mohammed Shami	1
6	Mayank Agarwal	1
7	Cheteshwar Pujara	1
8	Prithvi Shaw	1
9	Aaron Finch	1
10	KL Rahul	1
11	Steve Smith	1
12	Marcus Stoinis	1
13	Ravichandran Ashwin	1
14	Pat Cummins	1

SUM

-- Players with the most runs during the league
SELECT p.name, SUM(runs) AS total_runs
FROM matchruns
JOIN players AS p
ON matchruns.player_id = p.id
WHERE runs IS NOT NULL
GROUP BY p.name
ORDER BY total_runs DESC

	name character varying (50)	total_runs bigint
1	Virat Kohli	385
2	Steve Smith	308
3	Hardik Pandya	288
4	Aaron Finch	284
5	Matthew Wade	256
6	Glenn Maxwell	245
7	Ravindra Jadeja	216
8	Marnus Labuschagne	208
9	Shikhar Dhawan	201
10	Ajinkya Rahane	181
11	KL Rahul	174
12	David Warner	152
13	Shubman Gill	113
14	Cameron Green	89
15	Tim Paine	87

-- Players with the most runs in ODI
SELECT p.name, SUM(runs) AS total_runs
FROM matchruns
JOIN players AS p
ON matchruns.player_id = p.id
WHERE runs IS NOT NULL
AND match_id BETWEEN 1001 AND 1003
GROUP BY p.name
ORDER BY total_runs DESC

	name character varying (50)	total_runs bigint
1	Aaron Finch	249
2	Steve Smith	216
3	Hardik Pandya	210
4	Virat Kohli	173
5	Glenn Maxwell	167
6	David Warner	152
7	Shikhar Dhawan	120
8	Ravindra Jadeja	115
9	KL Rahul	93
10	Marnus Labuschagne	79
11	Shreyas Iyer	59
12	Alex Carey	55
13	Mayank Agarwal	50
14	Navdeep Saini	39
15	Shubman Gill	33

-- Players with the most runs in T20
```sql
SELECT p.name, SUM(runs) AS total_runs
FROM matchruns
JOIN players AS p
ON matchruns.player_id = p.id
WHERE runs IS NOT NULL
AND match_id BETWEEN 1004 AND 1006
GROUP BY p.name
ORDER BY total_runs DESC
```

Data Output   Explain   Messages   Notifications

	name character varying (50) 🔒	total_runs 🔒 bigint
1	Matthew Wade	145
2	Virat Kohli	134
3	Steve Smith	82
4	KL Rahul	81
5	Shikhar Dhawan	81
6	Hardik Pandya	78
7	Glenn Maxwell	78
8	Moises Henriques	61
9	D'Arcy Short	50
10	Sanju Samson	48
11	Ravindra Jadeja	44
12	Aaron Finch	35
13	Shardul Thakur	17
14	Marcus Stoinis	16
15	Washington Sundar	14

-- Highest Scores in the league
```
SELECT match_id, p.name, SUM(runs) AS total_runs
FROM matchruns
JOIN players AS p
ON matchruns.player_id = p.id
WHERE runs IS NOT NULL
GROUP BY match_id, p.name
ORDER BY total_runs DESC
```

	match_id integer	name character varying (50)	total_runs bigint
1	1008	Ajinkya Rahane	139
2	1001	Aaron Finch	114
3	1001	Steve Smith	105
4	1002	Steve Smith	104
5	1003	Hardik Pandya	92
6	1001	Hardik Pandya	90
7	1002	Virat Kohli	89
8	1006	Virat Kohli	85
9	1002	David Warner	83
10	1006	Matthew Wade	80
11	1008	Shubman Gill	80
12	1007	Virat Kohli	78
13	1008	Marnus Labuschagne	76
14	1002	KL Rahul	76
15	1003	Aaron Finch	75

--Number of balls faced in descending order
```
SELECT p.name, SUM(balls) AS total_balls
FROM matchruns
JOIN players AS p
ON matchruns.player_id = p.id
WHERE runs IS NOT NULL
GROUP BY p.name
ORDER BY total_balls DESC
```

	name character varying (50)	total_balls bigint
1	Virat Kohli	468
2	Marnus Labuschagne	386
3	Matthew Wade	374
4	Ajinkya Rahane	359
5	Aaron Finch	303
6	Steve Smith	283
7	Ravindra Jadeja	280
8	Cameron Green	257
9	Cheteshwar Pujara	242
10	Hardik Pandya	233
11	Shikhar Dhawan	199
12	Travis Head	158
13	KL Rahul	156
14	David Warner	153
15	Tim Paine	146

--Most Boundaries by a player in the league
SELECT p.name, SUM(fours + sixes) AS total_boundaries
FROM matchruns
JOIN players AS p
ON matchruns.player_id = p.id
WHERE runs IS NOT NULL
GROUP BY p.name
ORDER BY total_boundaries DESC

	name character varying (50)	total_boundaries bigint
1	Virat Kohli	38
2	Steve Smith	38
3	Aaron Finch	34
4	Matthew Wade	32
5	Glenn Maxwell	31
6	Hardik Pandya	30
7	Shikhar Dhawan	26
8	Ravindra Jadeja	21
9	Ajinkya Rahane	19
10	KL Rahul	19
11	Shubman Gill	19
12	Marnus Labuschagne	18
13	David Warner	16
14	Tim Paine	12
15	Mayank Agarwal	10

--Most sixes per game in the league

SELECT p.name, SUM(fours) AS fours, SUM(sixes) AS sixes
FROM matchruns
JOIN players AS p
ON matchruns.player_id = p.id
WHERE runs IS NOT NULL
GROUP BY p.name
ORDER BY sixes DESC

Data Output   Explain   Messages   Notifications

	name character varying (50)	fours bigint	sixes bigint
1	Glenn Maxwell	15	16
2	Hardik Pandya	19	11
3	Steve Smith	29	9
4	Virat Kohli	30	8
5	KL Rahul	12	7
6	Aaron Finch	27	7
7	Ravindra Jadeja	14	7
8	David Warner	13	3
9	Matthew Wade	29	3
10	Shardul Thakur	0	2
11	Moises Henriques	5	2
12	Shikhar Dhawan	24	2
13	Sanju Samson	2	2
14	Shreyas Iyer	8	1
15	Ajinkya Rahane	18	1

-- Most runs scored in an innings in the series
SELECT p.name, MAX(runs) AS maxruns
FROM matchruns AS m
JOIN players AS p
ON m.player_id = p.id
WHERE runs IS NOT NULL
GROUP BY p.name
ORDER BY maxruns DESC

Data Output   Explain   Messages   Notifications

	name character varying (50)	maxruns integer
1	Aaron Finch	114
2	Ajinkya Rahane	112
3	Steve Smith	105
4	Hardik Pandya	92
5	Virat Kohli	89
6	David Warner	83
7	Matthew Wade	80
8	KL Rahul	76
9	Shikhar Dhawan	74
10	Tim Paine	73
11	Marnus Labuschagne	70
12	Ravindra Jadeja	66
13	Glenn Maxwell	63
14	Joe Burns	51
15	Shubman Gill	45

--Best bowling figures in an innings

SELECT match_id, p.name, innings, COUNT(*) AS wickets
FROM matchruns
JOIN players AS p
ON matchruns.bowler_id = p.id
GROUP BY match_id, innings, p.name
ORDER BY wickets DESC

ata Output   Explain   Messages   Notifications

match_id integer	name character varying (50)	innings integer	wickets bigint
1007	Josh Hazlewood	2	5
1007	Ravichandran Ashwin	1	4
1008	Jasprit Bumrah	1	4
1007	Pat Cummins	2	4
1007	Mitchell Starc	1	4
1001	Adam Zampa	1	4
1002	Pat Cummins	1	3
1004	Thangarasu Natarajan	1	3
1008	Ravichandran Ashwin	1	3
1007	Umesh Yadav	1	3
1004	Yuzvendra Chahal	1	3
1008	Mohammed Siraj	2	3
1008	Nathan Lyon	1	3
1001	Mohammed Shami	1	3
1003	Shardul Thakur	1	3

CASE STATEMENT
-- Outcomes with each player batting (CASE STATEMENT)

SELECT match_id, team_id, innings, player_id, runs, balls,
CASE WHEN runs= 0 THEN 'Duck!'
WHEN runs BETWEEN 50 AND 100 THEN 'Half Century'
WHEN runs BETWEEN 100 AND 200 THEN 'Century'
WHEN runs>= 200 THEN 'Double Century'
WHEN runs IS NULL THEN 'Did not bat'
ELSE 'Howzat!' END AS outcome
FROM matchruns

	match_id integer	team_id integer	innings integer	player_id integer	runs integer	balls integer	outcome text
1	1001	1	1	2125	69	76	Half Century
2	1001	1	1	2101	114	124	Century
3	1001	1	1	2120	105	66	Century
4	1001	1	1	2122	0	1	Duck!
5	1001	1	1	2114	45	19	Howzat!
6	1001	1	1	2112	2	2	Howzat!
7	1001	1	1	2106	17	13	Howzat!
8	1001	1	1	2107	1	1	Howzat!
9	1001	1	1	2121	[null]	[null]	Did not bat
10	1001	1	1	2126	[null]	[null]	Did not bat
11	1001	1	1	2109	[null]	[null]	Did not bat
12	1001	1	1	[null]	21	[null]	Howzat!
13	1001	2	1	2202	22	18	Howzat!
14	1001	2	1	2207	74	86	Half Century
15	1001	2	1	2201	21	21	Howzat!

--Total number of runs made in the tournament so far

SELECT
CASE WHEN team_id = 1 THEN 'Australia'
ELSE 'India'
END AS team,
SUM(runs) AS total_runs
FROM matchruns
GROUP BY team
ORDER BY total_runs DESC

	team text	total_runs bigint
1	Australia	2261
2	India	2156

SUBQUERIES

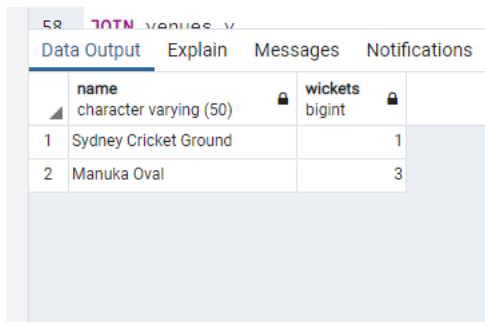**--Semi Scorecard for matches taken place at Brisbane (Semi Join)**
SELECT m.match_id, player_id , runs, balls, bowler_id, wicket_id
FROM matchruns AS m
WHERE match_id IN (SELECT id FROM match
WHERE venue_id = 2)
ORDER BY m.match_id

Data Output   Explain   Messages   Notifications

	match_id integer	player_id integer	runs integer	balls integer	bowler_id integer	wicket_id integer
1	1010	2125	1	4	2224	2
2	1010	2129	5	23	2226	2
3	1010	2112	108	204	2211	2
4	1010	2120	36	77	2225	2
5	1010	2124	45	87	2211	2
6	1010	2108	47	107	2225	1
7	1010	2102	50	104	2226	2
8	1010	2107	2	8	2226	3
9	1010	2121	20	35	[null]	6
10	1010	2113	24	22	2225	1
11	1010	2109	11	27	2211	1
12	1010	[null]	20	[null]	[null]	[null]
13	1010	2222	44	74	2113	2
14	1010	2208	7	15	2107	2
15	1010	2215	25	94	2109	2

--Semi Scorecard for matches taken place with India as winners
SELECT m.match_id, player_id , runs, balls, bowler_id, wicket_id
FROM matchruns AS m
WHERE match_id IN (SELECT id FROM match
WHERE winner = 2)
ORDER BY m.match_id

	match_id integer	player_id integer	runs integer	balls integer	bowler_id integer	wicket_id integer
	1003	2207	16	27	2103	2
	1003	2208	33	39	2104	3
	1003	2201	63	78	2109	2
	1003	2209	19	21	2126	2
	1003	2217	5	11	2104	3
	1003	2213	92	76	[null]	6
	1003	2210	66	50	[null]	6
	1003	2226	[null]	[null]	[null]	[null]
	1003	2228	[null]	[null]	[null]	[null]
)	1003	2204	[null]	[null]	[null]	[null]
	1003	2211	[null]	[null]	[null]	[null]
:	1003	[null]	10	[null]	[null]	[null]
}	1003	2112	7	13	2211	1
	1003	2101	75	82	2210	2
;	1003	2120	7	15	2226	2

FROM
-- Number of wickets taken per venue (Moises Henriques)
SELECT v.name, subquery.wickets
FROM match
JOIN venues AS v
ON match.venue_id = v.id,
(SELECT match_id, p.name AS bowler, COUNT(*) AS wickets
FROM matchruns
JOIN players AS p
ON matchruns.bowler_id = p.id
WHERE p.name = 'Moises Henriques'
GROUP BY match_id, p.name) AS subquery
WHERE match.id = subquery.match_id
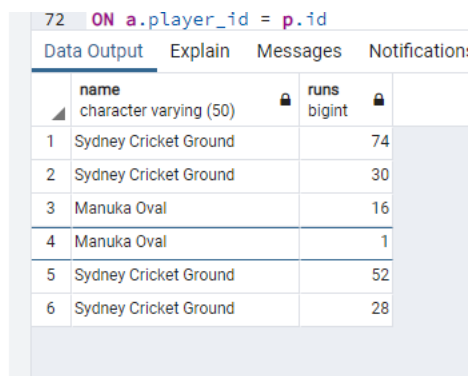
	name character varying (50)	wickets bigint
1	Sydney Cricket Ground	1
2	Manuka Oval	3

--Number of runs made per venue (Shikhar Dhawan)
SELECT v.name, subquery.runs
FROM match
JOIN venues v
ON match.venue_id = v.id,
(SELECT match_id, p.name, SUM(runs) AS runs
FROM matchruns m
JOIN players p
ON m.player_id = p.id
WHERE p.name = 'Shikhar Dhawan'
GROUP BY match_id, p.name) AS subquery
WHERE match.id = subquery.match_id

	name character varying (50)	runs bigint
1	Sydney Cricket Ground	74
2	Sydney Cricket Ground	30
3	Manuka Oval	16
4	Manuka Oval	1
5	Sydney Cricket Ground	52
6	Sydney Cricket Ground	28

--Players who score more than 100 runs in the series
SELECT p.name, runs, balls, fours, sixes FROM
(SELECT * FROM matchruns WHERE runs > 100) a
LEFT JOIN players AS p
ON a.player_id = p.id

```
81    SELECT * FROM matchruns
```

Data Output   Explain   Messages   Notifications

name character varying (50)	runs integer	balls integer	fours integer	sixes integer
1	Aaron Finch	114	124	9	2
2	Steve Smith	105	66	11	4
3	Steve Smith	104	64	14	2
4	Ajinkya Rahane	112	223	12	0
5	Steve Smith	131	226	16	0
6	Marnus Labuschagne	108	204	9	0

WHERE
-- Show all scores where Australia won
SELECT * FROM matchruns
WHERE match_id
IN (SELECT id FROM match WHERE winner = 1)

	match_id integer	team_id integer	innings integer	player_id integer	runs integer	balls integer	fours integer	sixes integer	bowler_id integer	wicket_id integer	notes character varying (100)
1	1001	1	1	2125	69	76	6	0	2221	2	Caught by KL Rahul
2	1001	1	1	2101	114	124	9	2	2204	2	Caught by KL Rahul
3	1001	1	1	2120	105	66	11	4	2221	1	[null]
4	1001	1	1	2122	0	1	0	0	2205	2	Caught by KL Rahul
5	1001	1	1	2114	45	19	5	3	2221	2	Caught by Ravindra Jadeja
6	1001	1	1	2112	2	2	0	0	2219	2	Caught by Shikhar Dhawan
7	1001	1	1	2106	17	13	2	0	[null]	6	[null]
8	1001	1	1	2107	1	1	0	0	[null]	6	[null]
9	1001	1	1	2121	[null]	[null]	[null]	[null]	[null]	[null]	Innings close at 374-6
10	1001	1	1	2126	[null]	[null]	[null]	[null]	[null]	[null]	Innings close at 374-6
11	1001	1	1	2109	[null]	[null]	[null]	[null]	[null]	[null]	Innings close at 374-6
12	1001	1	1	[null]	21	[null]	[null]	[null]	[null]	[null]	[null]
13	1001	2	1	2202	22	18	2	1	2109	2	Caught by Glenn Maxwell
14	1001	2	1	2207	74	86	10	0	2126	2	Caught by Mitchell Starc
15	1001	2	1	2201	21	21	2	1	2109	2	Caught by Aaron Finch

--Show all LBW dismissals
SELECT * FROM matchruns
WHERE wicket_id
IN (SELECT id FROM wickets WHERE dismissal = 'LBW')

match_id integer	team_id integer	innings integer	player_id integer	runs integer	balls integer	fours integer	sixes integer	bowler_id integer	wicket_id integer	notes character varying (100)
1002	2	1	2204	0	2	0	0	2126	3	[null]
1003	2	1	2208	33	39	3	1	2104	3	[null]
1003	2	1	2217	5	11	0	0	2104	3	[null]
1003	1	1	2126	4	7	0	0	2204	3	[null]
1004	1	1	2114	2	3	0	0	2211	3	[null]
1004	1	1	2111	30	20	1	1	2206	3	[null]
1006	1	1	2124	80	53	7	2	2226	3	[null]
1006	2	1	2209	0	1	0	0	2123	3	[null]
1007	2	1	2216	42	92	3	1	2121	3	[null]
1007	2	1	2227	16	25	2	0	2109	3	[null]
1007	1	1	2124	8	51	1	0	2204	3	[null]
1007	1	1	2105	8	41	0	0	2204	3	[null]
1007	1	1	2112	47	119	7	0	2229	3	[null]
1008	1	1	2108	12	60	0	0	2224	3	[null]
1008	1	1	2113	20	17	2	1	2204	3	[null]

--Show all match taken place at Melbourne Cricket Ground
SELECT * FROM match
WHERE venue_id
        IN (SELECT id FROM venues WHERE city = 'Melbourne')

Data Output Explain Messages Notifications

	id [PK] integer	start_date date	end_date date	format_id integer	venue_id integer	teama_id integer	teamb_id integer	winner integer	potm integer
1	1008	2020-12-26	2020-12-30	3	4	1	2	2	2216

--Show all matches that are ODI
SELECT * FROM match
WHERE format_id
IN (SELECT id FROM formats WHERE format = 'ODI')

	id [PK] integer	start_date date	end_date date	format_id integer	venue_id integer	teama_id integer	teamb_id integer	winner integer	potm integer
1	1001	2020-11-27	2020-11-27	1	5	1	2	1	2120
2	1002	2020-11-29	2020-11-29	1	5	1	2	1	2120
3	1003	2020-12-02	2020-12-02	1	3	1	2	2	2213

-- Total number of runs made by each team throughout
SELECT teams.name AS teams,
(SELECT SUM(runs) FROM matchruns
 WHERE teams.id = matchruns.team_id) AS runs
 FROM teams
 ORDER by runs DESC

	teams character varying (50)	runs bigint
1	Australia	3574
2	India	3399

--Runs made by each player compared to overall
SELECT p.name, SUM(runs) AS total_runs_per_test,
(SELECT SUM(runs) FROM matchruns) AS overall_AVG
FROM matchruns
JOIN players AS p
ON matchruns.player_id = p.id
JOIN match
ON matchruns.match_id = match.id
WHERE runs IS NOT NULL
GROUP BY p.name
ORDER BY total_runs_per_test DESC

	name character varying (50)	total_runs_per_test bigint	overall_avg bigint
1	Steve Smith	611	6973
2	Marnus Labuschagne	505	6973
3	Virat Kohli	385	6973
4	Matthew Wade	318	6973
5	Shubman Gill	292	6973
6	Hardik Pandya	288	6973
7	Aaron Finch	284	6973
8	Rishabh Pant	274	6973
9	Cheteshwar Pujara	271	6973
10	Ajinkya Rahane	268	6973
11	Cameron Green	257	6973
12	Glenn Maxwell	245	6973
13	Ravindra Jadeja	244	6973
14	David Warner	219	6973
15	Tim Paine	204	6973

-- Number of runs scored by each team specifically via match
SELECT teams.name AS team,
(SELECT SUM(runs) FROM matchruns AS m
 WHERE teams.id = m.team_id AND match_id= 1006) AS runs
 FROM teams
 ORDER by runs

	team character varying (50)	runs bigint
1	India	174
2	Australia	186

--Number of runs made by each team vs overall
SELECT t.name AS team, SUM(runs) AS team_runs,
(SELECT SUM(runs) FROM matchruns) AS runs
 FROM matchruns AS m
 JOIN teams AS t
 ON m.team_id = t.id
 GROUP BY t.name
 ORDER by team_runs DESC

	team character varying (50)	team_runs bigint	runs bigint
1	Australia	3574	6973
2	India	3399	6973

COMMON TABLE EXPRESSIONS

--Number of players who reach half-centuries in each venue
WITH hc AS(
SELECT match_id
FROM matchruns WHERE runs >= 50)
SELECT v.name, COUNT(h.match_id) AS half_century
FROM match AS m
LEFT JOIN venues AS v
ON m.venue_id = v.id
JOIN hc AS h
ON h.match_id = m.id
GROUP BY v.name
ORDER BY half_century DESC

	name character varying (50)	half_century bigint
1	Sydney Cricket Ground	28
2	The Gabba	8
3	Manuka Oval	6
4	Adelaide Oval	3
5	Melbourne Cricket Ground	2

--Number of players who reach centuries in each venue
WITH hc AS(
SELECT match_id
FROM matchruns WHERE runs >= 100)
SELECT v.name, COUNT(h.match_id) AS century
FROM match AS m
LEFT JOIN venues AS v
ON m.venue_id = v.id
JOIN hc AS h
ON h.match_id = m.id
GROUP BY v.name
ORDER BY century

	name character varying (50)	century bigint
1	Melbourne Cricket Ground	1
2	The Gabba	1
3	Sydney Cricket Ground	4

WINDOW FUNCTIONS

RANKINGS

--Rankings of Players scored the most runs in the series
SELECT p.name AS player, SUM(runs),
RANK() OVER(ORDER BY SUM(runs)DESC) AS total_runs
FROM matchruns AS m
JOIN players AS p
ON m.player_id = p.id
WHERE runs IS NOT NULL
GROUP BY p.name
ORDER BY total_runs

	player character varying (50)	sum bigint	total_runs bigint
1	Steve Smith	611	1
2	Marnus Labuschagne	505	2
3	Virat Kohli	385	3
4	Matthew Wade	318	4
5	Shubman Gill	292	5
6	Hardik Pandya	288	6
7	Aaron Finch	284	7
8	Rishabh Pant	274	8
9	Cheteshwar Pujara	271	9
10	Ajinkya Rahane	268	10
11	Cameron Green	257	11
12	Glenn Maxwell	245	12
13	Ravindra Jadeja	244	13
14	David Warner	219	14
15	Tim Paine	204	15

--Number of balls bowled by each venue
SELECT v.name, SUM(balls) AS total_balls,
RANK() OVER(ORDER BY SUM(balls)DESC) AS runs
FROM matchruns AS m
LEFT JOIN match
ON m.match_id = match.id
LEFT JOIN venues AS v
ON match.venue_id = v.id
GROUP BY v.name

	name character varying (50)	total_balls bigint	runs bigint
1	Sydney Cricket Ground	4250	1
2	The Gabba	2414	2
3	Melbourne Cricket Ground	1848	3
4	Adelaide Oval	1254	4
5	Manuka Oval	842	5

--Number of boundaries made by each player in ranking
SELECT p.name, SUM(fours + sixes) AS total_boundaries,
RANK() OVER(ORDER BY SUM(fours + sixes)DESC) AS boundaries
FROM matchruns m
JOIN players p
ON m.player_id = p.id
WHERE runs IS NOT NULL
GROUP BY p.name

	name character varying (50)	total_boundaries bigint	boundaries bigint
1	Steve Smith	75	1
2	Marnus Labuschagne	52	2
3	Shubman Gill	42	3
4	Matthew Wade	41	4
5	Virat Kohli	38	5
6	Aaron Finch	34	6
7	Rishabh Pant	34	6
8	Glenn Maxwell	31	8
9	Hardik Pandya	30	9
10	Cameron Green	29	10
11	Cheteshwar Pujara	29	10
12	Tim Paine	27	12
13	Shikhar Dhawan	26	13
14	Ravindra Jadeja	26	13
15	Ajinkya Rahane	26	13

SLIDING FUNCTIONS
--Running total of runs
SELECT match_id, t.name AS team, p.name AS players, runs,
SUM(runs) OVER(ORDER BY match_id ROWS BETWEEN UNBOUNDED PRECEDING
AND CURRENT ROW) AS running_total
FROM matchruns AS m
LEFT JOIN teams AS t
ON m.team_id = t.id
LEFT JOIN players AS p
ON m.player_id = p.id

	match_id integer	team character varying (50)	players character varying (50)	runs integer	running_total bigint
	1001	Australia	David Warner	69	69
	1001	Australia	Aaron Finch	114	183
	1001	Australia	Steve Smith	105	288
	1001	Australia	Marcus Stoinis	0	288
	1001	Australia	Glenn Maxwell	45	333
	1001	Australia	Marnus Labuschagne	2	335
	1001	Australia	Alex Carey	17	352
	1001	Australia	Pat Cummins	1	353
	1001	Australia	Mitchell Starc	[null]	353
	1001	Australia	Adam Zampa	[null]	353
	1001	Australia	Josh Hazlewood	[null]	353
	1001	Australia	[null]	21	374
	1001	India	Mayank Agarwal	22	396
	1001	India	Shikhar Dhawan	74	470
	1001	India	Virat Kohli	21	491

--Running average of runs
```
SELECT match_id, t.name AS team, p.name AS players, runs,
AVG(runs) OVER(ORDER BY match_id ROWS BETWEEN UNBOUNDED PRECEDING
AND CURRENT ROW) AS running_avg
FROM matchruns AS m
LEFT JOIN teams AS t
ON m.team_id = t.id
LEFT JOIN players AS p
ON m.player_id = p.id
WHERE runs IS NOT NULL
```

match_id integer	team character varying (50)	players character varying (50)	runs integer	running_avg numeric
1001	Australia	David Warner	69	69.0000000000000000
1001	Australia	Aaron Finch	114	91.5000000000000000
1001	Australia	Steve Smith	105	96.0000000000000000
1001	Australia	Marcus Stoinis	0	72.0000000000000000
1001	Australia	Glenn Maxwell	45	66.6000000000000000
1001	Australia	Marnus Labuschagne	2	55.8333333333333333
1001	Australia	Alex Carey	17	50.2857142857142857
1001	Australia	Pat Cummins	1	44.1250000000000000
1001	Australia	[null]	21	41.5555555555555556
1001	India	Mayank Agarwal	22	39.6000000000000000
1001	India	Shikhar Dhawan	74	42.7272727272727273
1001	India	Virat Kohli	21	40.9166666666666667
1001	India	Shreyas Iyer	2	37.9230769230769231
1001	India	KL Rahul	12	36.0714285714285714
1001	India	Hardik Pandya	90	39.6666666666666667

--Number of Overs played in a game
SELECT match_id, t.name, ROUND(SUM(balls/6.0), 2) AS overs
FROM matchruns m
JOIN teams t
ON m.team_id = t.id
WHERE runs IS NOT NULL
GROUP BY match_id, t.name
ORDER BY overs DESC

ata Output   Explain   Messages   Notifications

match_id integer	name character varying (50)	overs numeric
1009	India	233.00
1010	India	209.50
1009	Australia	194.00
1010	Australia	192.83
1008	Australia	176.67
1008	India	131.33
1007	India	115.67
1007	Australia	93.33
1001	India	50.50
1001	Australia	50.33
1003	India	50.33
1002	India	50.33
1002	Australia	50.17
1003	Australia	49.83
1006	Australia	20.17

--Run ranges by a player (David Warner)
WITH bins AS (
SELECT generate_series(0, 90, 10) AS lower,
generate_series(10, 100, 10) AS upper),
runs AS (SELECT player_id, runs FROM matchruns)
SELECT lower, upper, count(runs)
FROM bins
JOIN runs
ON runs >= lower
AND runs < upper
WHERE player_id = 2125
GROUP BY lower, upper
ORDER BY lower

77   SELECT generate_series (0, 600, 50) AS
Data Output   Explain   Messages   Notifications

lower integer	upper integer	count bigint
0	10	2
10	20	1
40	50	1
60	70	1
80	90	1

-- Number of balls within a range

```
WITH bins AS (
SELECT generate_series (0, 600, 50) AS lower,
generate_series (50, 650, 50) AS upper),
balls AS (
SELECT balls FROM matchruns)
SELECT lower, upper, COUNT(*)
FROM bins
JOIN balls
ON balls >= lower
AND balls < upper
GROUP BY lower, upper
ORDER BY lower
```

Data Output   Explain   Messages   Notificati

	lower integer	upper integer	count bigint
1	0	50	178
2	50	100	44
3	100	150	18
4	150	200	7
5	200	250	5

--Mean and Median of runs made per venue

```
SELECT v.name AS venue, ROUND(AVG(runs), 2) AS mean, percentile_disc(0.5)
WITHIN GROUP (ORDER BY runs) AS median_runs
FROM matchruns
LEFT JOIN match AS m
ON matchruns.match_id = m.id
LEFT JOIN venues AS v
ON m.venue_id = v.id
GROUP BY v.name
ORDER BY mean
```

Data Output   Explain   Messages   Notifications

	venue character varying (50)	mean numeric	median_runs integer
1	Adelaide Oval	13.76	7
2	Melbourne Cricket Ground	19.29	14
3	Manuka Oval	22.60	12
4	The Gabba	28.87	24
5	Sydney Cricket Ground	30.23	20

-- Mean and Median of runs made per player
SELECT p.name AS player, ROUND(AVG(runs), 2) AS mean, percentile_disc(0.5)
WITHIN GROUP (ORDER BY runs) AS median_runs
FROM matchruns AS m
LEFT JOIN players AS p
ON m.player_id = p.id
WHERE runs IS NOT NULL
GROUP BY p.name
ORDER BY mean DESC

115   FROM matchruns AS m

Data Output   Explain   Messages   Notifications

	player character varying (50)	mean numeric	median_runs integer
1	Aaron Finch	56.80	60
2	Rishabh Pant	54.80	36
3	Virat Kohli	48.13	40
4	Hardik Pandya	48.00	28
5	Marnus Labuschagne	45.91	47
6	Steve Smith	43.64	24
7	Shubman Gill	41.71	35
8	Glenn Maxwell	40.83	45
9	Ravindra Jadeja	40.67	28
10	David Warner	36.50	13
11	Will Pucovski	36.00	10
12	Cheteshwar Pujara	33.88	25
13	Ajinkya Rahane	33.50	24
14	Shikhar Dhawan	33.50	28
15	Rohit Sharma	32.25	26

-- Mean and Median of fours made per player

SELECT p.name AS player, ROUND(AVG(fours), 2) AS mean, percentile_disc(0.5)
WITHIN GROUP (ORDER BY fours) AS median_runs
FROM matchruns AS m
LEFT JOIN players AS p
ON m.player_id = p.id
WHERE fours IS NOT NULL
GROUP BY p.name
ORDER BY mean DESC

	player character varying (50)	mean numeric	median_runs integer
1	Rishabh Pant	6.00	4
2	Shubman Gill	5.57	7
3	Aaron Finch	5.40	6
4	Marnus Labuschagne	4.73	5
5	Steve Smith	4.64	1
6	Shikhar Dhawan	4.00	3
7	[null]	4.00	0
8	Tim Paine	3.86	3
9	Virat Kohli	3.75	2
10	Rohit Sharma	3.75	3
11	Cheteshwar Pujara	3.63	2
12	Matthew Wade	3.45	3
13	David Warner	3.33	1
14	Hardik Pandya	3.17	1
15	Ravindra Jadeja	3.17	3

MISCELLANEOUS
--StrikeRates for each player
SELECT p.name, (SUM(runs)/NULLIF(SUM(balls), 0.0)* 100) AS SR
FROM matchruns m
JOIN players p
ON m.player_id = p.id
WHERE runs IS NOT NULL
AND runs != 0
GROUP BY p.name
ORDER BY SR DESC

	name character varying (50)	sr numeric
1	Daniel Sams	240.0000000000000000
2	Mitchell Swepson	240.0000000000000000
3	Marcus Stoinis	228.5714285714285700
4	Glenn Maxwell	177.5362318840579700
5	Sanju Samson	141.1764705882352900
6	Hardik Pandya	123.6051502145922700
7	Moises Henriques	118.0555555555555600
8	KL Rahul	112.9870129870129900
9	Shreyas Iyer	110.9375000000000000
10	Shikhar Dhawan	101.0050251256281400
11	Prithvi Shaw	100.00000000000000000000
12	Ashton Agar	100.00000000000000000000
13	D'Arcy Short	100.00000000000000000000
14	Alex Carey	100.00000000000000000000
15	Mohammed Siraj	95.00000000000000000000

--Number of Player of the Match Awards
SELECT p.name playerofthematch, COUNT(*)
FROM match
JOIN players AS p
ON match.potm = p.id
GROUP BY p.name
ORDER BY COUNT(*) DESC

	playerofthematch character varying (50)	count bigint
1	Steve Smith	3
2	Hardik Pandya	2
3	Yuzvendra Chahal	1
4	Tim Paine	1
5	Rishabh Pant	1
6	Ajinkya Rahane	1
7	Mitchell Swepson	1