



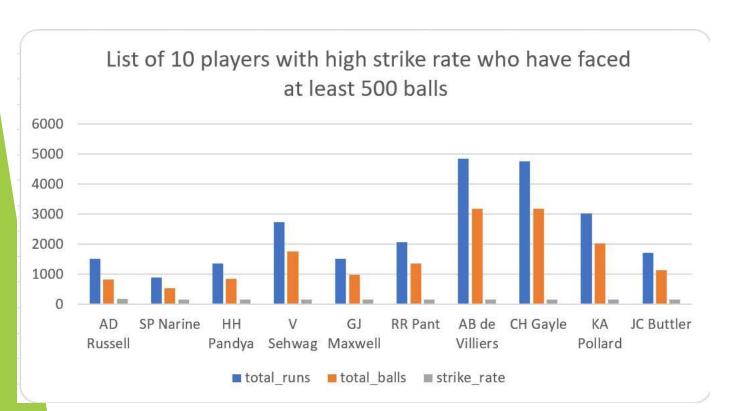
Query 1) Identify and bid on 2-3 players with high strike rates (S.R) who have faced at least 500 balls in the IPL. The goal is to secure these players without exceeding the budget allocated for each individual.

SELECT batsman,
SUM(batsman_runs) AS total_runs,
COUNT(batsman) AS total_balls,
ROUND((SUM(batsman_runs)/COUNT(batsman)) * 100,2) AS strike_rate
FROM ipl_ball
GROUP BY batsman
HAVING COUNT(batsman) >= 500
ORDER BY strike_rate DESC
LIMIT 10;

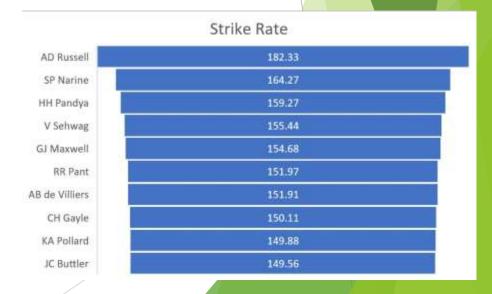
List of 10 players with high strike rate who have faced at least 500 balls

Name of 3 players with Highest Strike Rate:

- 1) AD Russell
- 2) SP Narine
- 3) HH Pandya



batsman	total_runs	total_balls	strike_rate
AD Russell	1517	832	182.33
SP Narine	892	543	164.27
HH Pandya	1349	847	159.27
V Sehwag	2728	1755	155.44
GJ Maxwell	1505	973	154.68
RR Pant	2079	1368	151.97
AB de Villiers	4849	3192	151.91
CH Gayle	4772	3179	150.11
KA Pollard	3023	2017	149.88
JC Buttler	1714	1146	149.56



Query 2) Identify and bid on 2-3 players with excellent batting averages who have played more than two IPL seasons. The goal is to secure these players without exceeding the allocated budget for each individual.

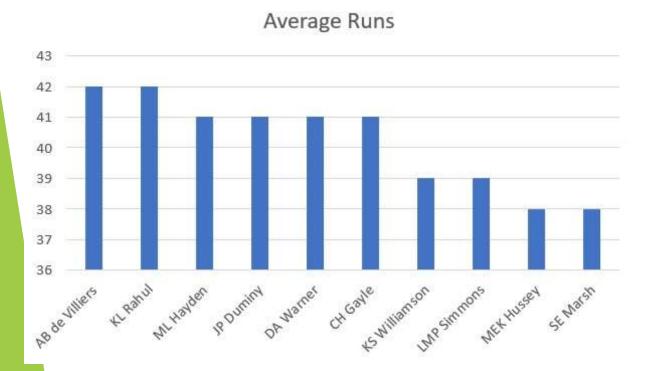
```
SELECT
B.batsman,
COUNT(DISTINCT SUBSTRING(M.match_date, 7, 4)) AS seasons_played,
SUM(B.batsman_runs) AS total_runs,
COUNT(*) AS total_balls,
SUM(CASE WHEN B.is_wicket = 1 AND B.batsman = B.player_dismissed THEN 1 ELSE 0 END) AS dismissals,
ROUND((SUM(B.batsman_runs) / NULLIF(SUM(CASE WHEN B.is_wicket = 1 AND B.batsman = B.player_dismissed
THEN 1 ELSE 0 END), 0)),2) AS average
FROM ipl_ball AS B
INNER JOIN ipl_matches AS M ON B.id = M.id
GROUP BY B. batsman
HAVING COUNT(*) >= 500 AND COUNT(DISTINCT SUBSTRING(M.match_date, 7, 4)) > 2
ORDER BY average DESC
```

LIMIT 10;

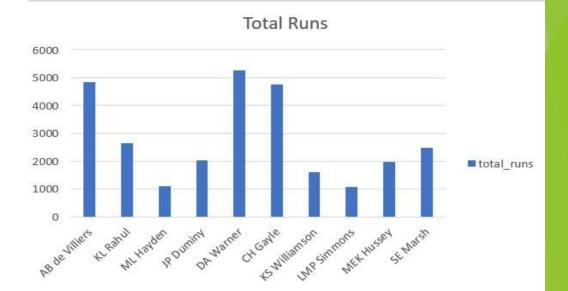
List of 10 players with good average rate who have played more than 2 IPL seasons

Name of 3 players with good average rate

- 1) AB de Villiers
- 2) KL Rahul
- 3) ML Hayden



batsman	season_playe	ed total_runs	wicket_ball	avg_runs
AB de Villiers	13	4849	114	42
KL Rahul	7	2647	62	42
ML Hayden	3	1107	27	41
JP Duminy	8	2029	49	41
DA Warner	11	5254	126	41
CH Gayle	12	4772	116	41
KS Williamson	6	1619	41	39
LMP Simmons	4	1079	27	39
MEK Hussey	7	1977	52	38
SE Marsh	9	2477	64	38



Query 3) Secure 2-3 players who have scored the most runs through boundaries and have participated in more than two IPL seasons. The focus is to enhance the team's explosive batting potential without overshooting the budget for each player.

```
SELECT B.batsman ,
B.batting_team ,
COUNT(DISTINCT SUBSTRING(M.match_date, 7, 4)) AS seasons_played,
SUM(B.batsman_runs) AS total_runs,
SUM(CASE WHEN B.batsman_runs IN (4,6) THEN 1 ELSE 0 END ) AS total_boundaries
FROM ipl_ball AS B
INNER JOIN ipl_matches AS M ON B.id = M.id
GROUP BY B.batsman , B.batting_team
HAVING COUNT(DISTINCT SUBSTRING(M.match_date, 7, 4)) > 2 AND SUM(CASE WHEN B.batsman_runs IN (4,6)
THEN 1 ELSE 0 END ) > 0
ORDER BY total_boundaries DESC
LIMIT 10;
```

List of 10 players who have scored most runs in boundaries and have played more the 2 IPL season

3 Hard-hitting players who have scored most runs in boundaries and have played more the 2 ipl season

- 1) Virat Kohli
- 2) SK Raina
- 3) AB De Villiers





batsman	batting_team	season_played	total_runs	total_boundaries
V Kohli	Royal Challengers Bangalore	13	5878	706
SK Raina	Chennai Super Kings	10	4527	583
AB de Villiers	Royal Challengers Bangalore	10	4178	561
RG Sharma	Mumbai Indians	10	4060	525
DA Warner	Sunrisers Hyderabad	6	3819	501
CH Gayle	Royal Challengers Bangalore	7	3163	488
MS Dhoni	Chennai Super Kings	11	4058	466
G Gambhir	Kolkata Knight Riders	7	3035	398
KA Pollard	Mumbai Indians	11	3023	394
AM Rahane	Rajasthan Royals	7	2810	355





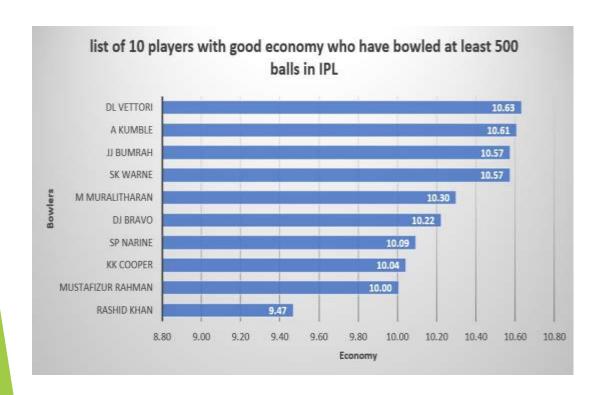
Query 4) Secure 2-3 bowlers with impressive economy rates who have bowled at least 500 balls in IPL. This aims to strengthen the bowling lineup with players who can restrict the opposition's scoring effectively while staying within the budget.

SELECT bowler,
ROUND(SUM(total_runs) * 6.0 / (SUM(`over`) + SUM(ball) / 6.0) * 10,2) AS economy_rate
FROM ipl_ball
GROUP BY bowler
HAVING COUNT(bowler) > 500
ORDER BY economy_rate
LIMIT 10;

List of 10 players with good economy who have bowled at least 500 balls in IPL so far

3 bowlers with good economy who have bowled at least 500 balls in IPL

- 1) DL Vettori
- 2) A Kumble
- 3) JJ Bumrah



bowler	economy_rate
Rashid Khan	9.47
Mustafizur Rahman	10.00
KK Cooper	10.04
SP Narine	10.09
DJ Bravo	10.22
M Muralitharan	10.30
SK Warne	10.57
JJ Bumrah	10.57
A Kumble	10.61
DL Vettori	10.63

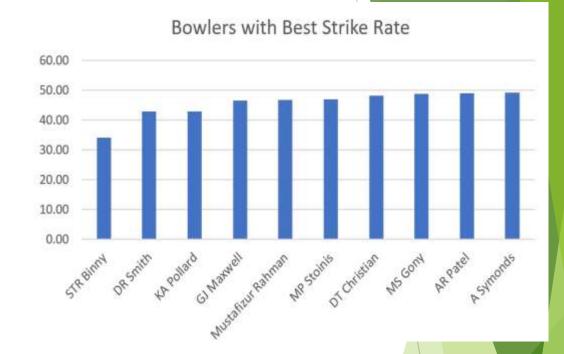
Query 5) Acquire 2-3 bowlers with outstanding strike rates who have bowled at least 500 balls in the IPL. This strategy aims to enhance the team's bowling attack with players who excel at taking wickets frequently while managing the auction budget effectively.

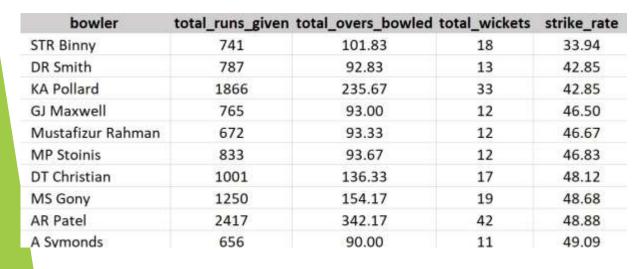
```
SELECT bowler,
SUM(total runs) AS runs given,
SUM(total_balls)/6 AS overs_bowled,
SUM(CASE WHEN is_wiclet = 1 THEN 1 ELSE 0 END) AS total_wickets,
SUM(total_balls)/SUM(CASE WHEN is_wiclet = 1 THEN 1 ELSE 0 END) AS strike_rate
FROM
SELECT
SUM(batsman_runs) AS total_runs,
COUNT(ball) AS total_balls ,
SUM(CASE WHEN dismissal_kind IN ('caught', 'bowled', 'lbw') THEN 1 ELSE 0 END) AS total_wickets
FROM ipl ball
WHERE extras_type NOT IN ('wides', 'noballs')
GROUP BY bowler, id
AS new stats
GROUP BY bowler
HAVING COUNT(total_balls) > 500
ORDER BY strike rate ASC
LIMIT 10;
```

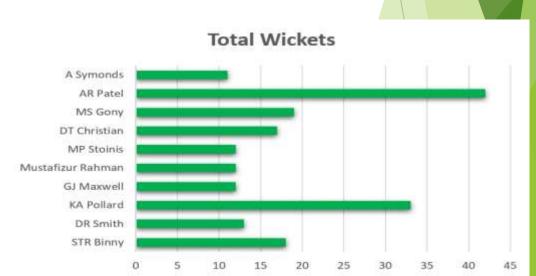
List of 10 players with All rounders with the best batting as well as bowling strike rate and who have faced at least 500 balls in IPL so far and have bowled minimum 300 balls

Top 3 Bowlers

- 1) STR Binny
- 2) DR Smith
- 3) KA Pollard









Query 6) Acquire 2-3 all-rounders who have faced at least 500 balls and bowled a minimum of 300 balls in the IPL. These players should have outstanding batting and bowling strike rates, enhancing the team's balance and performance in both departments.

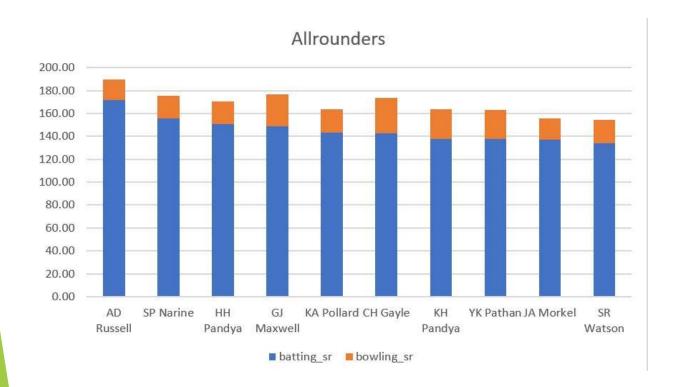
```
WITH
Batsman_stats AS (
SELECT batsman,
SUM(batsman runs) AS total runs,
COUNT(*) AS balls_faced
FROM ipl_ball
GROUP BY batsman
HAVING COUNT(*) >= 500
),
Bowler_stats AS (
SELECT bowler,
COUNT(*) AS balls_bowled,
SUM(CASE WHEN dismissal_kind IN ('caught', 'bowled', 'lbw')THEN 1 ELSE 0 END) AS total_wickets
FROM ipl_ball
GROUP BY bowler
HAVING COUNT(*) >= 300
```

```
Allrounder_stats AS (
SELECT
A.batsman,
A.total_runs,
A.balls_faced,
B.balls_bowled,
B.total_wickets,
(Cast(A.total_runs As Decimal) *100 / Nullif(A.balls_faced, 0)) As batting_strike_rate,
(CAST(B.balls_bowled AS Decimal) / Nullif(B.total_wickets, 0)) As bowling_strike_rate
FROM Batsman stats AS A
JOIN Bowler stats AS B
ON A.batsman = B.bowler
SELECT
batsman ,
batting_strike_rate AS batting_SR ,
bowling_strike_rate AS bowling_SR
FROM Allrounder stats
ORDER BY batting_SR DESC , bowling_SR ASC
LIMIT 10;
```

List of 10 players with All Rounders with the best batting as well as bowling strike rate and who have faced at least 500 balls in IPL so far and have bowled minimum 300 balls

Top 3 All Rounders

- 1) AD Russel
- 2) SP Narine
- 3) HH Pandya



batsman	batting_sr	bowling_sr
AD Russell	172.00	17.70
SP Narine	155.67	19.75
HH Pandya	150.39	20.31
GJ Maxwell	148.57	27.90
KA Pollard	143.47	19.92
CH Gayle	142.79	30.74
KH Pandya	137.55	26.18
YK Pathan	137.51	25.74
JA Morkel	136.99	18.82
SR Watson	134.14	19.97

Additional Questions for Final Assessment

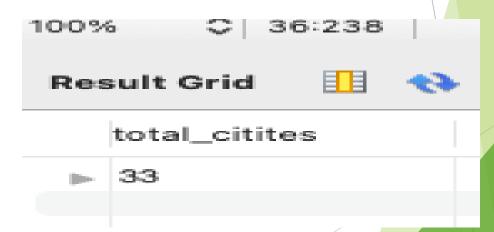
1) Get the count of cities that have hosted an IPL match Cities count: 33

```
SELECT

COUNT(DISTINCT CITY) AS total_citites

FROM

ipl_matches;
```



2) Create table *deliveries_v02* with all the columns of the table '*deliveries*' and an additional column *ball_result* containing values *boundary*, *dot* or *other* depending on the *total_run*

```
CREATE TABLE deliveries_v02 AS SELECT *,

CASE

WHEN total_runs >= 4 THEN 'Boundary'

WHEN total_runs = 0 THEN 'Dot'

WHEN total_runs = 0 AND is_wicket = 1 THEN 'Wicket'

ELSE 'Others'

END AS ball_result FROM

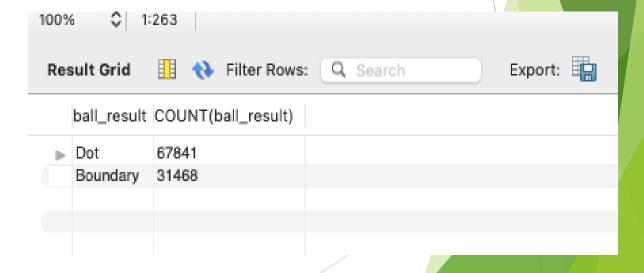
ipl_ball;

SELECT * FROM deliveries_v02;
```

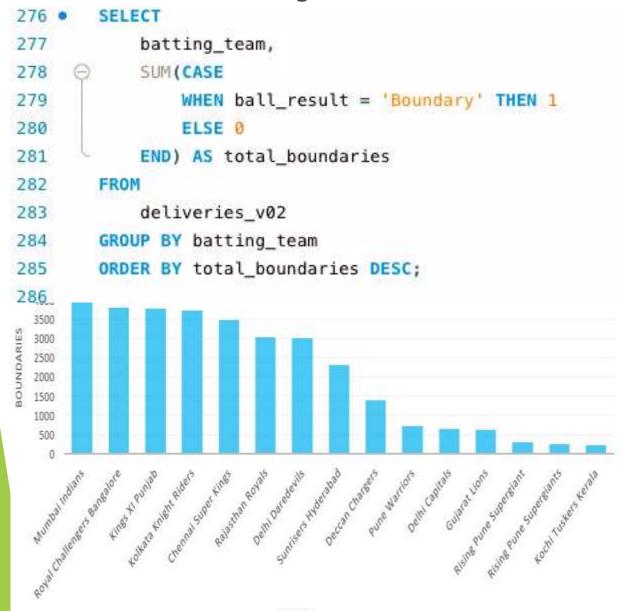
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id	inning	over	ball	batsman	non_striker	bowler	batsman_runs	extra_rur	ns total_run	s is_wicket	dismissal_kind	player_dismissed	extras_type	batting_team	bowling_team	ball_resu
335982	1	6	5	RT Ponting	BB McCullum	AA Noffke	1	0	1	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others
335982	1	6	6	BB McCullum	RT Ponting	AA Noffke	1	0	1	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others
335982	1	7	1	BB McCullum	RT Ponting	Z Khan	0	0	0	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Dot
335982	1	7	2	BB McCullum	RT Ponting	Z Khan	1	0	1	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others
335982	1	7	3	RT Ponting	BB McCullum	Z Khan	1	0	1	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others
335982	1	7	4	BB McCullum	RT Ponting	Z Khan	1	0	1	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others
335982	1	7	5	RT Ponting	BB McCullum	Z Khan	1	0	1	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others
335982	1	7	6	BB McCullum	RT Ponting	Z Khan	1	0	1	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others
335982	1	8	1	BB McCullum	RT Ponting	JH Kallis	0	0	0	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Dot
335982	1	8	2	BB McCullum	RT Ponting	JH Kallis	0	0	0	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Dot
335982	1	8	3	BB McCullum	RT Ponting	JH Kallis	0	0	0	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Dot
335982	1	8	4	BB McCullum	RT Ponting	JH Kallis	1	0	1	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others
335982	1	8	5	RT Ponting	BB McCullum	JH Kallis	1	0	1	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others
335982	1	8	6	BB McCullum	RT Ponting	JH Kallis	2	0	2	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others
335982	1	9	1	RT Ponting	BB McCullum	SB Joshi	1	0	1	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others
335982	1	9	2	BB McCullum	RT Ponting	SB Joshi	1	0	1	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others
335982	1	9	3	RT Ponting	BB McCullum	SB Joshi	1	0	1	0	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others

3) Write a query to fetch the total number of boundaries and dot balls from the deliveries_v02 table.

SELECT
 ball_result, COUNT(ball_result)
 FROM
 deliveries_v02
 WHERE
 ball_result NOT IN ('Others')
 GROUP BY ball_result;

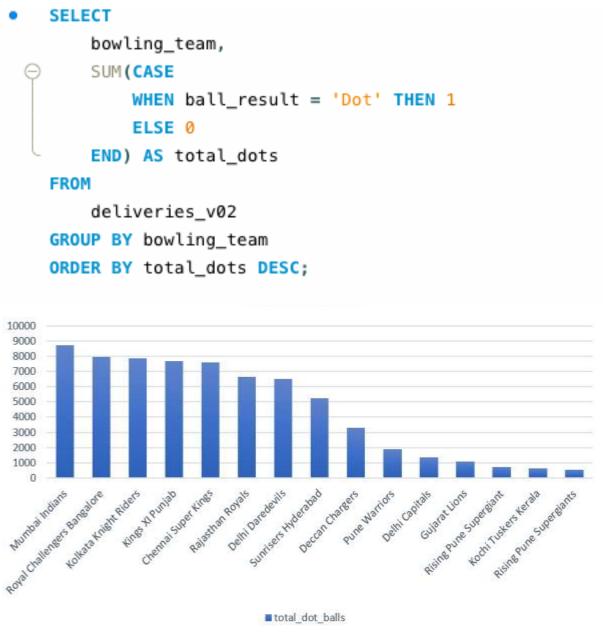


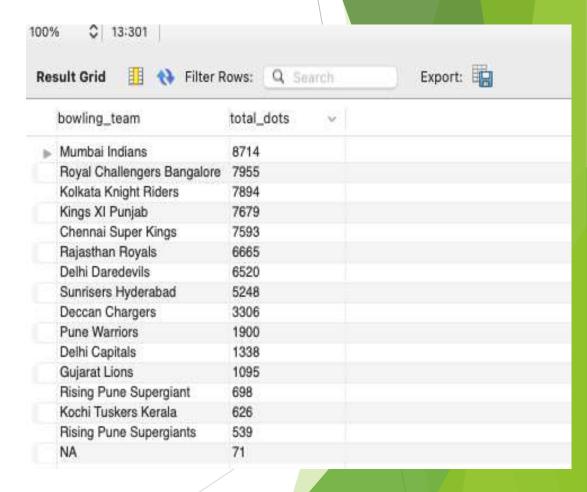
4) Write a query to fetch the total number of boundaries scored by each team from the *deliveries_v02* table and order it in descending order of the number of boundaries scored





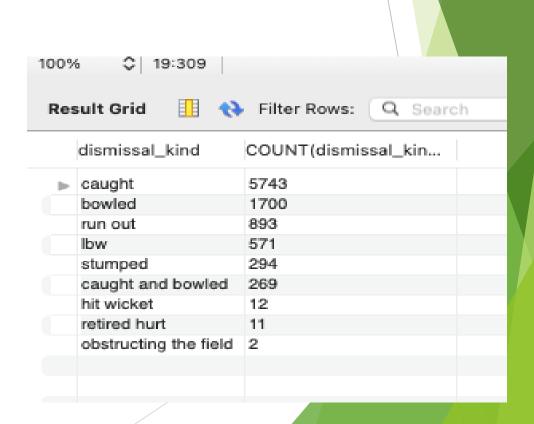
5) Write a query to fetch the total number of dot balls bowled by each team and order it in descending order of the total number of dot balls bowled





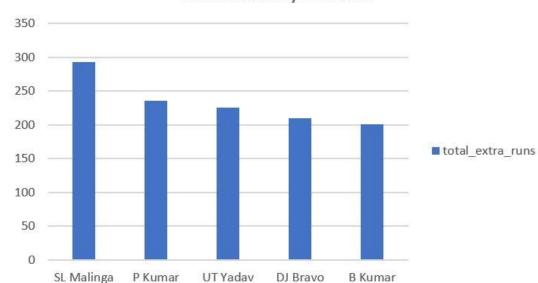
6) Write a query to fetch the total number of dismissals by dismissal kinds where dismissal kind is not NA

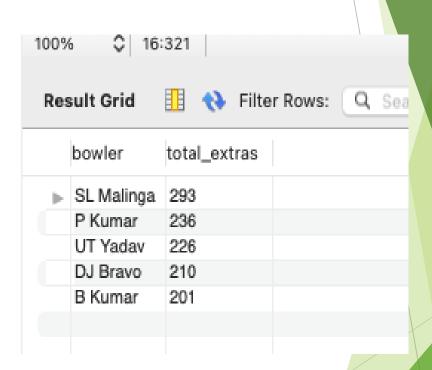
```
SELECT
    dismissal_kind, COUNT(dismissal_kind)
FROM
    deliveries_v02
WHERE
    dismissal_kind NOT IN ('NA')
        AND dismissal_kind IS NOT NULL
GROUP BY dismissal_kind
ORDER BY COUNT(dismissal_kind) DESC;
```



7) Write a query to get the top 5 bowlers who conceded maximum extra runs from the deliveries table







8) Write a query to create a table named *deliveries_v03* with all the columns of *deliveries_v02* table and two additional column (named *venue* and *match_date*) of *venue* and *date* from table *matches*

```
• CREATE TABLE deliveries_v03 AS SELECT A.*, B.venue, B.match_date AS match_date FROM deliveries_v02 AS A

JOIN

ipl_matches AS B ON A.id = B.id;
```

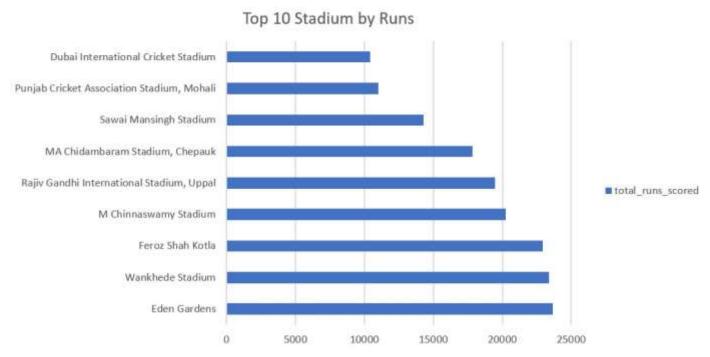
SELECT * FROM deliveries_v03;

100% Crid		Eilter De	nws: Q Sean	ah.	Evports	.	etch rows:	-										10
10001 100	nning over	0 8000	batsman	non_striker	1.00.00.00.00.00			an real restriction	_runs is_wick	ket dismissal_	kind player_dismissed	d fielder	extras_type	batting_team	bowling_team	ball_result	venue	match_date
▶ 335982 1	6	5	RT Ponting	BB McCullum	AA Noffke	1	0	1	0	NA	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others	M Chinnaswamy Stadium	18-04-2008
335982 1	6	6	BB McCullum		AA Noffke		0	1	0	NA	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others	M Chinnaswamy Stadium	18-04-2008
335982 1	7	1	BB McCullum	7 - 12 - 12 - 12 - 12 - 12 - 12 - 12 - 1	Z Khan	0	0	0	0	NA	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Dot	M Chinnaswamy Stadium	18-04-2008
335982 1	7	2			Z Khan	1	0	1	0	NA	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others	M Chinnaswamy Stadium	18-04-2008
335982 1	7	3		BB McCullum	Z Khan	1	0	1	0	NA	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others	M Chinnaswamy Stadium	18-04-2008
335982 1	7	4			Z Khan	1	0	1	0	NA	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others	M Chinnaswamy Stadium	18-04-2008
335982 1	7	5		BB McCullum		1	0	1	0	NA	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others	M Chinnaswamy Stadium	18-04-2008
335982 1	7	6	BB McCullum		Z Khan	1	0	1	0	NA	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others	M Chinnaswamy Stadium	18-04-2008
335982 1	8	1	BB McCullum		JH Kallis	0	0	0	0	NA	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Dot	M Chinnaswamy Stadium	18-04-2008
335982 1	8	2	BB McCullum		JH Kallis		0	0	0	NA	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Dot	M Chinnaswamy Stadium	18-04-2008
335982 1	8	3	BB McCullum		JH Kallis		0	0	0	NA	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Dot	M Chinnaswamy Stadium	18-04-2008
335982 1	8	4	BB McCullum		JH Kallis		0	1	0	NA	NA	NA	NA	Kolkata Knight Riders	Royal Challengers Bangalore	Others	M Chinnaswamy Stadium	18-04-2008
335085	8	5		RR McCullum	AND READ TO A		0	i	n	NΙΔ	NΙΔ	NA	NA		Poval Challennere Bannalore		M.Chinnaewamy Stadium	18-04-2008
dalivarias v0	0.44																	

9) Write a query to fetch the total runs scored for each venue and order it in the descending order of total runs scored.

venue, SUM(batsman_runs) AS total_run_scored
FROM
 deliveries_v03
GROUP BY venue

ORDER BY total_run_scored DESC;



venue	total_run_scor
Eden Gardens	22443
Wankhede Stadium	21845
Feroz Shah Kotla	21424
M Chinnaswamy Stadium	18451
Rajiv Gandhi International Stadium, Uppal	18348
MA Chidambaram Stadium, Chepauk	16661
Sawai Mansingh Stadium	13473
Punjab Cricket Association Stadium, Mohal	10421
Dubai International Cricket Stadium	8885
Sheikh Zayed Stadium	7842
Punjab Cricket Association IS Bindra Stadi.	6750
Maharashtra Cricket Association Stadium	6465
Sharjah Cricket Stadium	5637
M.Chinnaswamy Stadium	4798
Subrata Roy Sahara Stadium	4518
Dr DY Patil Sports Academy	4490
Kingsmead	4076
Brabourne Stadium	3596
Dr. Y.S. Rajasekhara Reddy ACA-VDCA C.	. 3585
SuperSport Park	3440
Sardar Patel Stadium, Motera	3204
Saurashtra Cricket Association Stadium	2891
Holkar Cricket Stadium	2735
Himachal Pradesh Cricket Association Sta.	. 2720
Barabati Stadium	2195
New Wanderers Stadium	2184
JSCA International Stadium Complex	1956
St George's Park	1904
Shaheed Veer Narayan Singh Internationa.	1664
Newlands	1380
Nehru Stadium	1286
Green Park	1236
De Beers Diamond Oval	858
Vidarbha Cricket Association Stadium, Ja	822
Buffalo Park	742
OUTsurance Oval	488

THANK YOU