The Indian Premier League (IPL), which features elite cricket players and draws sizable crowds, has become one of the world's most watched cricket competitions. In order to gain insight into player performance, team dynamics, and match outcomes, this project i use MySQL for analyzing data from the last three(2021-2022-2023) IPL seasons.

What is the total number of runs scored by top 10 player in the IPL

SELECT batting_summary.batsmanName, SUM(batting_summary.runs) AS total_runs
FROM   batting_summary
GROUP BY batting_summary.batsmanName
ORDER BY total_runs
DESC
LIMIT 10;

batsmanName	total_runs
ShubmanGill	1851
FafduPlessis	1831
RuturajGaikwad	1593
KLRahul	1516
JosButtler	1509
ShikharDhawan	1392
ViratKohli	1385
SanjuSamson	1304
SuryakumarYadav	1225
GlennMaxwell	1214

Total run scored by batsman and team name in 2021

SELECT   match_summery.year,   players.team,   batting_summary.batsmanName,
SUM(batting_summary.runs) AS total_runs
FROM   match_summery
JOIN   batting_summary ON match_summery.match_id = batting_summary.match_id
JOIN   players ON batting_summary.batsmanName = players.nameWHERE   year IN (2021 ,
2022, 2023)
GROUP BY match_summery.year , players.team , batting_summary.batsmanName
ORDER BY match_summery.year ASC , SUM(batting_summary.runs)
DESCLIMIT 50;

year	team	batsmanName	total_runs
2021	CSK	RuturajGaikwad	635
2021	CSK	FafduPlessis	633
2021	PK	KLRahul	626
2021	DC	ShikharDhawan	559
2021	RCB	GlennMaxwell	513
2021	RR	SanjuSamson	484
2021	KKR	ShubmanGill	478
2021	PK	MayankAgarwal	441
2021	DC	PrithviShaw	426
2021	RCB	DevduttPadikkal	411

Average run scored by each players in 2021 2022 2023

```sql
SELECT    match_summery.year,    players.name,    ROUND(AVG(batting_summary.runs), 2) AS avg_runs
FROM    players
JOIN    batting_summary ON batting_summary.batsmanName = players.name
JOIN    match_summery ON batting_summary.match_id = match_summery.match_idWHERE    year IN (2021 , 2022, 2023)
GROUP BY match_summery.year , players.name
HAVING AVG(batting_summary.runs) > 40
ORDER BY match_summery.year ASC , AVG(batting_summary.runs) DESC;
```

year	name	avg_runs
2021	ChrisLynn	49.00
2021	KLRahul	48.15
2022	JosButtler	50.76
2022	RajatPatidar	47.57
2022	KLRahul	44.00
2023	VivrantSharma	69.00
2023	ShubmanGill	52.35
2023	FafduPlessis	52.14
2023	ViratKohli	45.64
2023	SaiSudharsan	45.25
2023	DevonConway	44.80
2023	YashasviJaiswal	44.64
2023	HeinrichKlaasen	40.73

Players name with total sixes and total fours in year 2021,2022,2023

```sql
SELECT    players.name,    match_summery.year,    SUM(6s) AS
total_sixs,    SUM(4s) AS total_fours
FROM    batting_summary
JOIN    players ON batting_summary.batsmanName =
players.name
 JOIN    match_summery ON batting_summary.match_id =
match_summery.match_id
WHERE    year IN (2021 , 2022, 2023)
GROUP BY players.name , match_summery.year
HAVING SUM(6s) > 20 AND SUM(4s) > 20
ORDER BY match_summery.year ASC , SUM(6s) DESC , SUM(4s)
DESC;
```
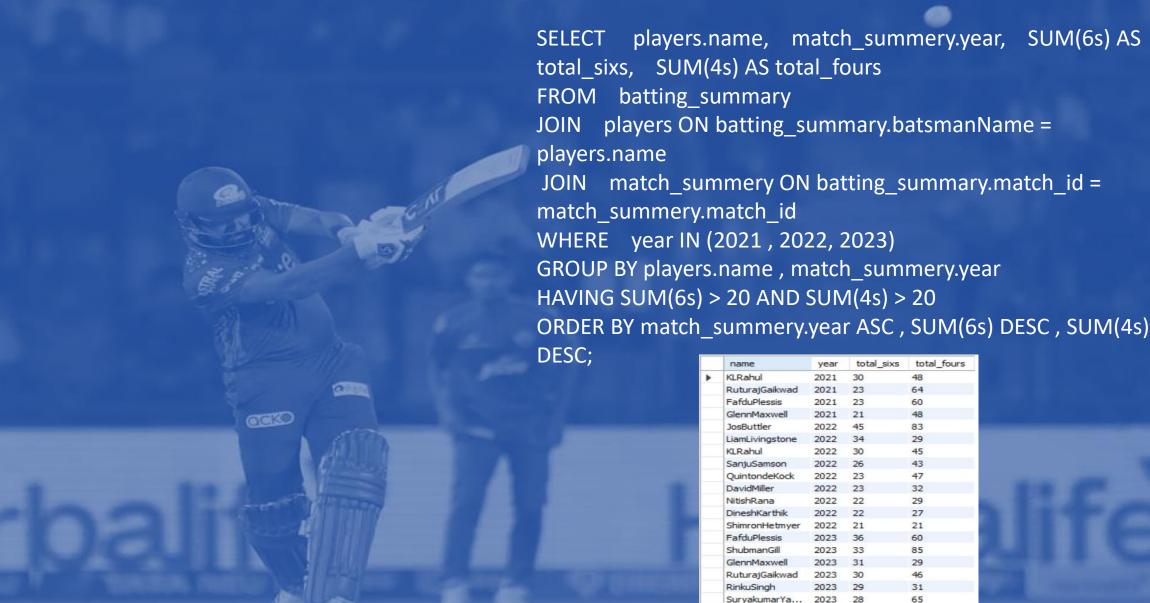
name	year	total_sixs	total_fours
KLRahul	2021	30	48
RuturajGaikwad	2021	23	64
FafduPlessis	2021	23	60
GlennMaxwell	2021	21	48
JosButtler	2022	45	83
LiamLivingstone	2022	34	29
KLRahul	2022	30	45
SanjuSamson	2022	26	43
QuintondeKock	2022	23	47
DavidMiller	2022	23	32
NitishRana	2022	22	29
DineshKarthik	2022	22	27
ShimronHetmyer	2022	21	21
FafduPlessis	2023	36	60
ShubmanGill	2023	33	85
GlennMaxwell	2023	31	29
RuturajGaikwad	2023	30	46
RinkuSingh	2023	29	31
SuryakumarYa...	2023	28	65
MarcusStoinis	2023	27	27
YashasviJaiswal	2023	26	82
NicholasPooran	2023	26	26
HeinrichKlaasen	2023	25	32

Average run score by M S Dhoni in three season's

```sql
SELECT    match_summery.year,
batting_summary.batsmanName,
AVG(batting_summary.runs) AS avg_runs
FROM    batting_summary
JOIN    match_summery ON batting_summary.match_id =
match_summery.match_id
WHERE    batsmanName = 'Msdhoni'      AND year IN (2021 ,
2022, 2023)
GROUP BY match_summery.year ,
batting_summary.batsmanName
ORDER BY match_summery.year ASC ,
AVG(batting_summary.runs) DESC;
```

year	batsmanName	avg_runs
2021	MSDhoni	10.3636
2022	MSDhoni	19.3333
2023	MSDhoni	8.6667

What is the total number of wickets taken by each bowler

bowlerName	total_wickets
MohammedShami	67
YuzvendraChahal	66
HarshalPatel	65
RashidKhan	62
AveshKhan	47
KagisoRabada	45
ArshdeepSingh	45
VarunChakravarthy	44
ShardulThakur	43
TrentBoult	42
RaviBishnoi	41
MohammedSiraj	39
RavindraJadeja	37
SunilNarine	36
JaspritBumrah	36
RahulChahar	35
AndreRussell	35
WaninduHasaranga	35
JoshHazlewood	34
JasonHolder	34
BhuvneshwarKumar	34
RavichandranAshwin	33
AnrichNortje	31

```
SELECT    bowling_summary.bowlerName,
SUM(bowling_summary.wickets) AS total_wickets
FROM    bowling_summary
GROUP BY bowling_summary.bowlerName
ORDER BY total_wickets DESC;
```

Who are the top 10 wicket-takers in the 2021 seasons bowler name with total wickets
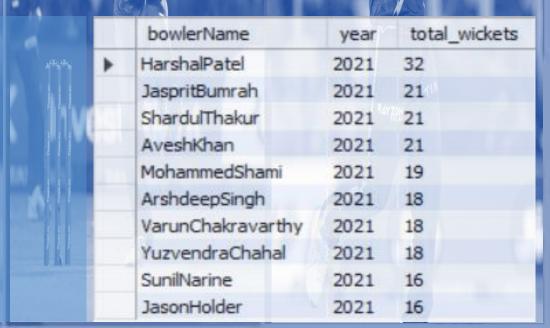
SELECT   bowling_summary.bowlerName,   match_summery.year,
SUM(bowling_summary.wickets) AS total_wickets
FROM   bowling_summary
JOIN   match_summery ON bowling_summary.match_id =
match_summery.match_id
WHERE   year IN (2021 , 2022, 2023)
GROUP BY bowling_summary.bowlerName , match_summery.year
ORDER BY match_summery.year ASC , SUM(bowling_summary.wickets)
DESCLIMIT 10;

bowlerName	year	total_wickets
HarshalPatel	2021	32
JaspritBumrah	2021	21
ShardulThakur	2021	21
AveshKhan	2021	21
MohammedShami	2021	19
ArshdeepSingh	2021	18
VarunChakravarthy	2021	18
YuzvendraChahal	2021	18
SunilNarine	2021	16
JasonHolder	2021	16

Average strike rate of all teams

SELECT   players.team,   match_summery.year,   ROUND(AVG(batting_summary.SR), 2) AS avg_striker_rate
FROM   players
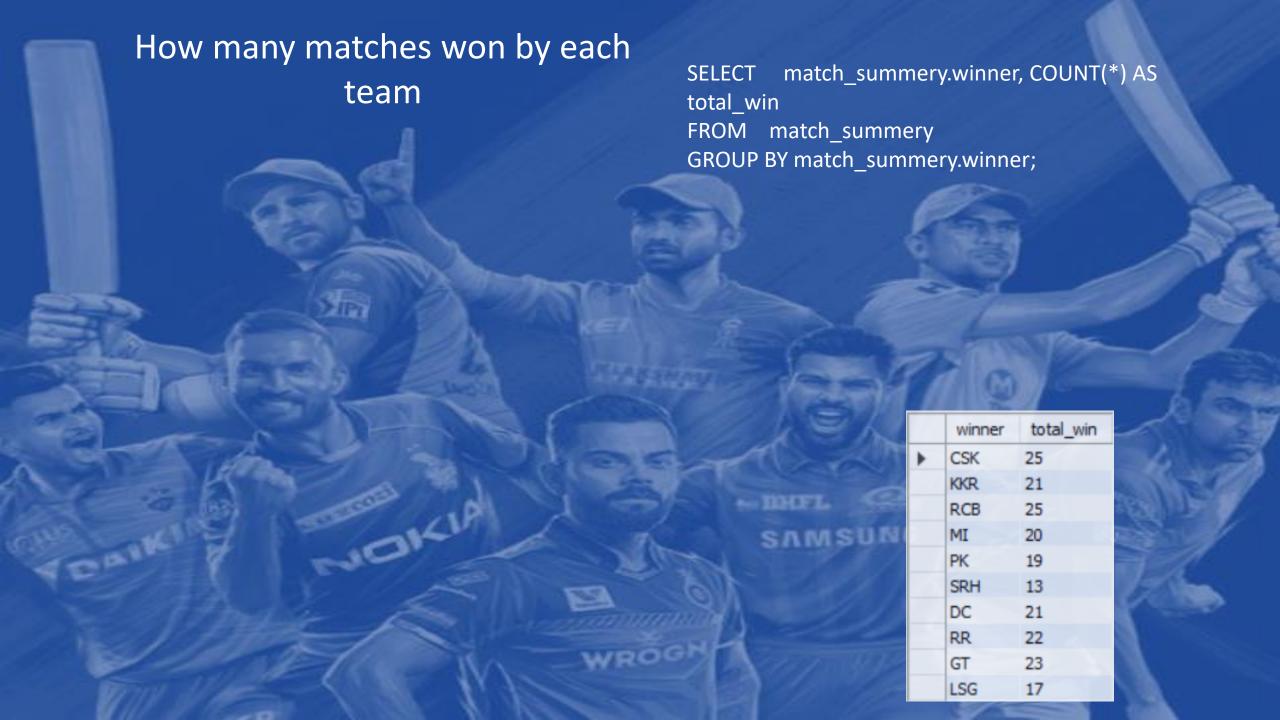JOIN   batting_summary ON players.name = batting_summary.batsmanName
JOIN   match_summery ON batting_summary.match_id = match_summery.match_id
WHERE   year IN (2021 , 2022, 2023)
GROUP BY players.team , match_summery.year

ORDER BY match_summery.year ASC , AVG(batting_summary.SR) DESC;

team	year	avg_striker_rate
CSK	2021	126.1
DC	2021	122.03
KKR	2021	108.93
MI	2021	104.3
PK	2021	103.92
SRH	2021	102.96
RCB	2021	102.29
RR	2021	99.47
RR	2022	128.85
DC	2022	124.77
RCB	2022	116.05
KKR	2022	115.58
PK	2022	115.32
LSG	2022	114.43
MI	2022	108.97
SRH	2022	103.8
GT	2022	101.06
CSK	2022	100.89
CSK	2023	128.85
LSG	2023	123.64
RR	2023	123.63
MI	2023	122.88
SRH	2023	120.08
RCB	2023	118.32

How many matches won by each team

```
SELECT    match_summery.winner, COUNT(*) AS
total_win
FROM    match_summery
GROUP BY match_summery.winner;
```

winner	total_win
CSK	25
KKR	21
RCB	25
MI	20
PK	19
SRH	13
DC	21
RR	22
GT	23
LSG	17

how many matches win by each team and run or wicket in three seasons

```sql
SELECT    match_summery.year,
match_summery.won_by,
match_summery.winner,
COUNT(match_summery.winner)
FROM    match_summery
WHERE    year IN (2021 , 2022, 2023)
GROUP BY match_summery.year ,
match_summery.won_by ,
match_summery.winner
ORDER BY match_summery.year ASC ,
COUNT(match_summery.winner) DESC;
```

year	won_by	winner	COUNT(match_summery.winner)
2021	wicket	DC	8
2021	wicket	KKR	7
2021	wicket	CSK	6
2021	run	CSK	5
2021	run	RCB	5
2021	wicket	RCB	4
2021	wicket	MI	4
2021	run	MI	3
2021	wicket	PK	3
2021	wicket	RR	3
2021	run	PK	3
2021	run	KKR	2
2021	wicket	SRH	2
2021	run	RR	2
2021	run	SRH	1
2021	run	DC	1

year	won_by	winner	COUNT(match_summery.winner)
2021	run	DC	1
2022	wicket	GT	8
2022	run	wicket	7
2022	run	RR	7
2022	wicket	SRH	5
2022	run	RCB	5
2022	wicket	KKR	4
2022	run	PK	4
2022	wicket	DC	4
2022	wicket	RCB	4
2022	run	GT	4
2022	wicket	RR	3
2022	wicket	PK	3
2022	wicket	MI	3
2022	run	DC	3
2022	run	CSK	3

year	won_by	winner	COUNT(match_summery.winner)
2022	run	CSK	3
2022	run	KKR	2
2022	wicket	LSG	2
2022	run	SRH	1
2022	run	MI	1
2022	wicket	CSK	1
2023	run	CSK	6
2023	wicket	GT	6
2023	wicket	MI	6
2023	run	GT	5
2023	run	LSG	5
2023	run	RCB	5
2023	wicket	CSK	4
2023	run	PK	4
2023	run	RR	4
2023	run	MI	3
2023	wicket	RR	3
2023	run	DC	3
2023	wicket	KKR	3
2023	wicket	LSG	3
2023	run	KKR	3
2023	wicket	RCB	2
2023	wicket	SRH	2
2023	wicket	DC	2
2023	wicket	PK	2
2023	run	SRH	2

THANK YOU