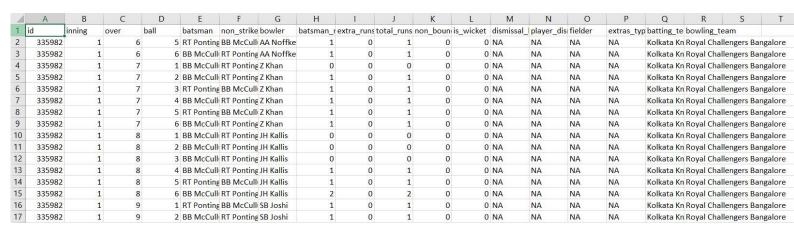
## **Databases**

## Table 1 - IPL (193468 Rows) (Ball by Ball)



## Table 2 – Matches (816 Rows)

4	Α	В	C	D	E	F	G	Н	1	J	K	L	M	N	0	P	Q	R
1	id	city	date	player_of_	venue	neutral_ve	team1	team2	toss_winn	toss_deci	s winner	result	result_mai	eliminato	method	umpire1	umpire2	
2	335982	Bangalore	18-04-2008	BB McCull	M Chinnas	. 0	Royal Cha	Kolkata Kr	Royal Cha	field	Kolkata Kr	runs	140	N	NA	Asad Rauf	RE Koertzen	
3	335983	Chandigarl	19-04-2008	MEK Husse	e Punjab Cri	0	Kings XI Pu	Chennai S	Chennai Sı	bat	Chennai Si	runs	33	N	NA	MR Benso	SL Shastri	
4	335984	Delhi	19-04-2008	MF Mahar	Feroz Shal	0	Delhi Dare	Rajasthan	Rajasthan	bat	Delhi Dare	wickets	9	N	NA	Aleem Dar	GA Pratapku	mar
5	335985	Mumbai	20-04-2008	MV Bouch	Wankhede	. 0	Mumbai Ir	Royal Cha	Mumbai Ir	bat	Royal Cha	l wickets	5	N	NA	SJ Davis	DJ Harper	
6	335986	Kolkata	20-04-2008	DJ Hussey	Eden Gard	0	Kolkata Kr	Deccan Ch	Deccan Ch	bat	Kolkata Kr	wickets	5	N	NA	BF Bowder	K Hariharan	
7	335987	Jaipur	21-04-2008	SR Watson	Sawai Mai	0	Rajasthan	Kings XI Pu	Kings XI Pu	bat	Rajasthan	wickets	6	N	NA	Aleem Dar	RB Tiffin	
8	335988	Hyderabac	22-04-2008	V Sehwag	Rajiv Gano	0	Deccan Ch	Delhi Dare	Deccan Ch	bat	Delhi Dare	wickets	9	N	NA	IL Howell	AM Saheba	
9	335989	Chennai	23-04-2008	ML Hayde	MA Chidar	0	Chennai S	Mumbai Ir	Mumbai Ir	field	Chennai Si	runs	6	N	NA	DJ Harper	GA Pratapku	mar
10	335990	Hyderabac	24-04-2008	YK Pathan	Rajiv Gano	0	Deccan Ch	Rajasthan	Rajasthan	field	Rajasthan	wickets	3	N	NA	Asad Rauf	MR Benson	
11	335991	Chandigarl	25-04-2008	KC Sangak	Punjab Cri	0	Kings XI Pu	Mumbai Ir	Mumbai Ir	field	Kings XI Pu	runs	66	N	NA	Aleem Dar	AM Saheba	
12	335992	Bangalore	26-04-2008	SR Watson	M Chinnas	0	Royal Cha	Rajasthan	Rajasthan	field	Rajasthan	wickets	7	N	NA	MR Benso	IL Howell	
13	335993	Chennai	26-04-2008	JDP Oram	MA Chidar	0	Chennai S	Kolkata Kr	Kolkata Kr	bat	Chennai Si	wickets	9	N	NA	BF Bowder	AV Jayapraka	ash
14	335994	Mumbai	27-04-2008	AC Gilchris	Dr DY Pati	0	Mumbai Ir	Deccan Ch	Deccan Ch	field	Deccan Ch	wickets	10	N	NA	Asad Rauf	SL Shastri	

```
with cte1 as (select year(date) as season, count(id) as totalmatches from matches group by season),
            cte2 as (SELECT
             year(date) as season, batsman, SUM(i.batsman_runs) AS bat, sum(is_wicket) as wik,
             sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
              sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
              sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
             sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
13
             sum(case when dismissal kind = 'hit wicket' then 1 else 0 end) as hit wicket,
sum(case when dismissal kind = 'obstructing the field' then 1 else 0 end) as obstructing the field,
15
              sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
              sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes
18
19
                  matches m cross join ipl i on m.id=i.id
20
21
                  group by season, batsman
22
23
25
          ctel.season, cte2.batsman, cte2.bat as total_runs, cte2.wik as got_out,
          cte2.fours,
27
          cte2.Caught,cte2.run_out, cte2.bowled, cte2.lbw, cte2.retired_hurt, cte2.Stumped, cte2.Caught_and_bowled
          from ctel join cte2 on ctel.season = cte2.season
          order by season, total runs desc
 33 •
         use ipl;
 35
          /*Simplified Player Analysis Seasonwise*/
 36 •
          season, batsman,batting_team as team, matches, bat as total_runs,balls,
          ((bat*100)/balls) as strike rate,
          ((bat)/matches) as average_runs,
           wik as got_out,
 41
           fours,
 42
 43
           (matches-wik) as not out,
          Caught,run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
 45
 46
 48
               year(date) as season,batting_team, batsman, SUM(i.batsman_runs) AS bat, sum(is_wicket) as wik,
              sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught, sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out, sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
 51
               sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
 52
              sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
 53
 54
 55
               sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
               sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
56
              sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing_the_field,
57
              sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
             sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
sum(case when extras_type = 'NA' or extras_type = 'noballs' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
59
61
              count(distinct m.id) as matches
62
64
                  matches m cross join ipl i on m.id=i.id
65
                   group by season, batsman, batting_team)q1
                  order by season, total_runs desc
         /* Powerplay Simplified Player Analysis Seasonwise*/
72
         season, batsman, matches, bat as total_runs, balls,
         ((bat*100)/balls) as strike_rate,
         ((bat)/matches) as average_runs,
          wik as got_out,
          sixes.
         Caught, run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
81
              year(date) as season, batsman, SUM(i.batsman_runs) AS bat, sum(is_wicket) as wik,
             sum(case when dismissal_kind = 'caught' then 1 else \theta end) as Caught, sum(case when dismissal_kind = 'run out' then 1 else \theta end) as run_out,
83
```

/\*Batsman Analysis Seasonwise\*/

```
sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
              sum(case when dismissal kind = 'lbw' then 1 else 0 end) as lbw,
              sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
 88
              sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
              sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
              sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
              sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing_the_field, sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
 91
 92
              sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
sum(case when extras_type = 'NA' or extras_type = 'noballs' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
 93
 94
                count(distinct m.id) as matches
 96
 97
                  matches m cross join ipl i on m.id=i.id
 99
                   where i over between 0 and 5
100
                   group by season, batsman
101
102
                  order by season, total_runs desc
103
104
          /* Middle Overs Simplified Player Analysis Seasonwise*/
105
107
          season, batsman, matches, bat as total_runs, balls,
          ((bat*100)/balls) as strike_rate,
108
109
          ((bat)/matches) as average_runs,
110
           wik as got_out,
111
           fours,
           sixes,
112
          Caught, run out, bowled, 1bw, retired hurt, Stumped, Caught and bowled
113
114
116
117
              year(date) as season, batsman, SUM(i.batsman_runs) AS bat, sum(is_wicket) as wik,
              sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
118
119
              sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
              sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired hurt,
121
122
              sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
              sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
124
              sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
125
              sum(case when dismissal kind = 'obstructing the field' then 1 else \theta end) as obstructing the field, sum(case when batsman runs = 4 then 1 else \theta end) as fours,
126
127
              sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
128
129
              sum(case when extras_type = 'NA' or extras_type = 'noballs' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
              count(distinct m.id) as matches
130
131
132
                  matches m cross join ipl i on m.id=i.id
133
134
                   where i.over between 6 and 15
135
                   group by season, batsman
137
                  order by season, total_runs desc
138
140
          /* Death Overs Simplified Player Analysis Seasonwise*/
141 •
142
          season, batsman, matches, bat as total_runs,balls,
          ((bat*100)/balls) as strike rate,
143
144
          ((bat)/matches) as average_runs,
145
           wik as got_out,
           fours,
147
           sixes,
          Caught,run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
148
150
151
         (SELECT
152
              year(date) as season, batsman, SUM(i.batsman_runs) AS bat, sum(is_wicket) as wik,
153
              sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
155
              sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
              sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
156
157
              sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
              sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
158
              sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
159
160
              sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
              sum(case when dismissal kind = 'obstructing the field' then 1 else 0 end) as obstructing the field,
161
              sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
sum(case when extras_type = 'NA' or extras_type = 'noballs' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
163
164
165
              count(distinct m.id) as matches
166
168
                  matches m cross join ipl i on m.id=i.id
```

```
where i.over between 16 and 19
170
                    group by season, batsman
 171
172
                   order by season, total_runs desc
173
175 •
                   use ipl:
176 •
               select distinct extras_type from ipl;
177
178 •
               Select
 180
               vear(date)
               from ipl i cross join matches m on i.id=m.id
 181
 182
               group by year(date), batsman, bowler
 183
 184
185 •
               use ipl;
186
 187
           /* Batsman Stats opponent wise */
 188 •
          select
189
          season, batsman, bowling team as opponent, matches, bat as total runs, balls,
 190
           ((bat*100)/balls) as strike_rate,
191
          ((bat)/matches) as average_runs,
           wik as got_out,
193
           fours.
194
           sixes,
          Caught,run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
196
197
198
199
              year(date) as season, bowling_team, batsman, SUM(i.batsman_runs) AS bat, sum(is_wicket) as wik,
              sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
200
202
              sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
              sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
203
              sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
205
              sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
206
              sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing_the_field,
207
208
              sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
              sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
sum(case when extras_type = 'NA' or extras_type = 'noballs' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
210
211
              count(distinct m.id) as matches
213
214
215
                   matches m cross join ipl i on m.id=i.id
216
                   where (i.over between 0 and 19)
                   group by season, batsman, bowling_team
218
219
                  order by season, total runs desc
223
          /* Batsman Stats bowler wise */
          Select * from (Select *,
224 •
225
           row_number() over(partition by batsman order by total_runs desc) as ro
226
          from
228
          (select
           batsman, bowler, matches, bat as total runs, balls,
229
           ((bat*100)/balls) as strike_rate,
231
          ((bat)/matches) as average_runs,
 232
           wik as got_out,
 233
           fours,
234
           sixes,
 235
          Caught,run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
236
          from
 238
239
                bowler, batsman, SUM(i.batsman_runs) AS bat, sum(is_wicket) as wik,
               sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught, sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out, sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
 241
 242
               sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
 243
 244
               sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
               sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
 246
               sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
               sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing the field, sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
 248
 249
               sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
251
              sum(case when extras_type = 'NA' or extras_type = 'noballs' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
252
              count(distinct m.id) as matches
254
255
                   matches m cross join ipl i on m.id=i.id
                   where (i.over between 0 and 19)
257
                   group by batsman, bowler
258
                   )q1
259
                   order by batsman, got_out desc)ex1)ex2
260
                  where ro <=10
```

```
/*Bowler Analysis Seasonwise*/
        select
         season, bowler, matches,
         wik-run_out as wickets, bat as total_runs,balls,
         (balls/(wik-run_out)) as strike_rate,
         ((bat)/(wik-run_out)) as average,
         (bat/(balls/6)) as economy,
          fours,
         sixes.
        Caught,run_out, bowled, 1bw, retired_hurt, Stumped, Caught_and_bowled
12
      ⊖ (SELECT
13
             year(date) as season, bowler,
15
             sum(case when extras_type = 'byes' or extras_type = 'legbyes' then null else i.batsman_runs + i.extra_runs end) AS bat,
             sum(is_wicket) as wik,
16
17
             sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
             sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
18
19
             sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as 1bw,
sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
21
             sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
22
23
             sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled, sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit wicket,
24
             sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing_the_field,
25
             sum(case when batsman_runs = 4 then 1 else 0 end) as fours, sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
26
27
28
             sum(case when extras_type = 'NA' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
29
             count(distinct m.id) as matches
31
                 matches m cross join ipl i on m.id=i.id
32
                  group by season, bowler)q1
34
                 order by season, wickets desc
35
37 ·
        select distinct extras_type from ipl;
        /*Check*/
30 .
        Select
40
         sum(case when extras type = 'NA' or extras type = 'legbyes' or extras type = 'byes' then 1 else 0 end) as balls
          from ipl i cross join matches m on i.id=m.id
42
         where bowler = 'A Mishra' and year(date) = '2012'
43
45
         /*Powerplay Bowler Analysis Seasonwise*/
        select
47
         season, bowler, matches,
48
         wik-run out as wickets,
         bat as total_runs,balls,
        (balls/(wik-run_out)) as strike_rate,
((bat)/(wik-run_out)) as average,
51
         (bat/(balls/6)) as economy,
53
         fours,
         sixes,
55
         Caught,run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
58
         (SELECT
             year(date) as season, bowler,
60
              sum(case when extras_type = 'byes' or extras_type = 'legbyes' then null else i.batsman_runs + i.extra_runs end) AS bat,
61
             sum(is wicket) as wik.
             sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
63
             sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
             sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
64
             sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
             sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
67
             sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
             sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught and_bowled, sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
69
             sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing_the_field,
70
             sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
sum(case when extras_type = 'NA' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
71
72
73
74
             count(distinct m.id) as matches
75
76
77
                  matches m cross join ipl i on m.id=i.id
                  where i.over between 0 and 5
                  group by season, bowler)q1
                 order by season, wickets desc
81
```

```
/*Middle Overs Bowler Analysis Seasonwise*/
 84 •
         select
 85
         season, bowler, matches,
         wik-run_out as wickets,
 87
          bat as total_runs,balls,
 88
         (balls/(wik-run out)) as strike rate,
         ((bat)/(wik-run_out)) as average,
         (bat/(balls/6)) as economy,
 91
           fours,
 93
         Caught,run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
         (SELECT
             year(date) as season, bowler,
 98
              sum(case when extras_type = 'byes' or extras_type = 'legbyes' then null else i.batsman_runs + i.extra_runs end) AS bat,
              sum(is_wicket) as wik,
100
              sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
             sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
101
102
103
              sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
              sum(case when dismissal kind = 'retired hurt' then 1 else 0 end) as retired hurt,
104
              sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
              sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
106
              sum(case when dismissal kind = 'hit wicket' then 1 else 0 end) as hit wicket,
107
              sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing_the_field,
              sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
109
              sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
110
              sum(case when extras_type = 'NA' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
112
              count(distinct m.id) as matches
113
114
115
                  matches m cross join ipl i on m.id=i.id
116
117
                  group by season, bowler)q1
118
                 order by season, wickets desc
119
120
121
         /*Death Overs Bowler Analysis Seasonwise*/
122 •
123
         season, bowler, matches,
         wik-run_out as wickets,
124
125
          bat as total_runs,balls,
         (balls/(wik-run_out)) as strike_rate,
126
         ((bat)/(wik-run_out)) as average,
128
         (bat/(balls/6)) as economy,
129
           fours,
131
         Caught,run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
132
133
134
         (SELECT
135
             year(date) as season, bowler,
136
              sum(case when extras_type = 'byes' or extras_type = 'legbyes' then null else i.batsman_runs + i.extra_runs end) AS bat,
              sum(is wicket) as wik,
137
              sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
138
             sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
139
140
              sum(case when dismissal_kind = 'ibw' then 1 else 0 end) as lbw,
sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
141
142
143
              sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
144
              sum(case when dismissal kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit wicket,
145
              sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing the_field, sum(case when batsman_runs = 4 then 1 else 0 end) as fours, sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
147
148
149
              sum(case when extras_type = 'NA' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
150
              count(distinct m.id) as matches
151
152
                  matches m cross join ipl i on m.id=i.id
153
154
                   where i.over between 16 and 19
155
                   group by season, bowler)q1
                  order by season, wickets desc
157
```

```
/*Bowler Analysis Most wickets against particular batsman*/
         select * from (select
161 •
162
163
          row_number() over(partition by bowler order by wickets desc) as ra
164
          from
165
166
          bowler, batsman, matches,
           wik-run out as wickets, bat as total runs, balls,
167
168
          (balls/(wik-run_out)) as strike_rate,
169
          ((bat)/(wik-run_out)) as average,
          (bat/(balls/6)) as economy,
170
171
           fours,
172
           sixes,
          Caught,run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
174
175
               bowler, batsman,
              sum(case when extras_type = 'byes' or extras_type = 'legbyes' then null else i.batsman_runs + i.extra_runs end) AS bat,
178
180
              sum(case when dismissal kind = 'caught' then 1 else 0 end) as Caught,
              sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
181
              sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
182
183
              sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
184
185
              sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
              sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
186
              sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing the field,
187
188
              sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
sum(case when extras_type = 'NA' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
189
190
191
192
              count(distinct m.id) as matches
193
194
195
                   matches m cross join ipl i on m.id=i.id
                   group by bowler, batsman)q1
196
197
                    rder by bowler, wickets desc)ex1)ex2
198
                  where ra <= 10
199
201
          /*Bowler Analysis Most runs against particular batsman*/
          select * from (select
202 •
203
204
          row_number() over(partition by bowler order by total_runs desc) as ra
205
206
          (select
207
          bowler, batsman, matches,
           wik-run_out as wickets, bat as total_runs,balls,
209
          (balls/(wik-run_out)) as strike_rate,
210
          ((bat)/(wik-run_out)) as average,
          (bat/(balls/6)) as economy,
212
           fours,
213
           sixes,
214
          Caught,run_out, bowled, 1bw, retired_hurt, Stumped, Caught_and_bowled
215
216
217
          (SELECT
218
               bowler, batsman,
              sum(case when extras_type = 'byes' or extras_type = 'legbyes' then null else i.batsman_runs + i.extra_runs end) AS bat,
220
              sum(is_wicket) as wik,
              sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
221
              sum(case when dismissal_kind = 'run out' then 1 else @ end) as run_out, sum(case when dismissal_kind = 'bowled' then 1 else @ end) as bowled, sum(case when dismissal_kind = 'lbw' then 1 else @ end) as lbw,
222
223
224
              sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
225
226
              sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
227
228
              sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
              sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing_the_field,
229
230
               sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
              sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
sum(case when extras_type = 'NA' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
231
232
233
               count(distinct m.id) as matches
234
235
236
                   matches m cross join ipl i on m.id=i.id
237
                   group by bowler, batsman)q1
                    order by bowler, wickets desc)ex1)ex2
238
239
                  where ra <= 10
240
```

```
/*Bowler Analysis Seasonwise against particular opponent*/
247 •
         select
          season, bowler,
248
249
         batting_team,
250
         matches,
           wik-run_out as wickets, bat as total_runs,balls,
          (balls/(wik-run_out)) as strike_rate,
((bat)/(wik-run_out)) as average,
252
253
          (bat/(balls/6)) as economy,
255
256
           sixes,
257
         Caught,run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
258
260
261
              year(date) as season, batting_team, bowler,
              sum(case when extras_type = 'byes' or extras_type = 'legbyes' then null else i.batsman_runs + i.extra_runs end) AS bat,
263
              sum(is wicket) as wik.
264
              sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
 265
             sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
266
 267
              sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
268
              sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
              sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
269
              sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
271
              sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
              sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing_the_field,
272
              sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing_the_field,
272
             sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
273
274
              sum(case when extras_type = 'NA' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
275
276
              count(distinct m.id) as matches
277
278
279
                  matches m cross join ipl i on m.id=i.id
280
                  group by season, bowler, batting_team)q1
281
                 order by season, bowler, wickets desc
282
285
         /*Bowler wise ultimate stats (Better Alternative to the previous one*/
287
          season.
288
          team,
          bowler,
290
         count(distinct id)as matches,
291
          sum(oute-run_out) as total_wickets,
293
          sum(runs) as runs.
294
          sum(balls) as balls,
295
          round(((sum(balls)/6))) as overs,
          ( case when sum(oute-run_out)=0 then sum(balls) else (sum(balls)/(sum(oute-run_out))) end) as strike rate,
296
          ( case when sum(oute-run_out)=0 then sum(runs) else ((sum(runs))/(sum(oute-run_out))) end) as average,
297
298
          (sum(runs)/(sum(balls)/6)) as economy,
         max(oute-run_out) as Highest_Number_of_wickets_in_an_innings,
299
          sum(dots) as dots,
 301
          sum(1s) as 1s,
 302
         sum(2s) as 2s,
          sum(3s) as 3s,
 304
          sum(4s) as 4s.
305
          sum(6s) as 6s,
          sum(Caught) as Caught, sum(run_out) as Run_out, sum(bowled) as Bowled, sum(lbw) as LBW, sum(stumped) as Stumped, sum(Caught_and_bowled) as Caught_and_bowled
307
309
310
         (select
         year(date) as season, date, id, inning, bowler,
311
         sum(total_runs) as runs,
312
         sum(is_wicket) as oute,
313
314
         sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
315
         sum(case when dismissal kind = 'run out' then 1 else 0 end) as run out,
316
         sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
317
         sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
         sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
318
         sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
         sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
sum(case when ((extras_type = 'NA') or (extras_type = 'byes') or (extras_type = 'legbyes')) then 1 else 0 end) as balls,
sum(case when extras_type <>'noballs' then (case when batsman_runs = 0 then 1 else 0 end) else 0 end) as dots,
320
321
323
         sum(case when batsman_runs = 1 then 1 else 0 end) as 1s,
sum(case when batsman_runs = 2 then 1 else 0 end) as 2s,
324
325
         sum(case when batsman_runs = 3 then 1 else 0 end) as 3s,
         sum(case when batsman_runs = 4 then 1 else 0 end) as 4s,
326
327
         sum(case when batsman_runs = 6 then 1 else 0 end) as 6s,
         bowling_team as team,
328
329
         batting team as opponent,
          dense_rank() over(partition by year(date) order by date, id) as match_no
331
         from
         (select
333
334
         i.id, i.inning, i.over, i.ball,i.batsman, i.batsman_runs, i.total_runs,i.bowler, i.dismissal_kind,
335
          i.is_wicket,i.extras_type, i.batting_team, i.bowling_team, m.city, m.date, m.winner,
          m.result, m.result_margin
337
338
         ipl i cross join matches m on i.id=m.id)q1
340
         group by season, date, id, inning, team, opponent, bowler
          order by season, date, id, inning, bowler, oute)q2
341
         group by season, team, opponent, bowler
343
```

```
/* Points Table Seasonwise*/
       select
        (matches- matches won) as matches lost,
        ((matches_won*100)/matches) as win_percentage
11
        season,
        count(team1) as matches,
        sum(case when team1 = winner then 1 else 0 end) as matches won,
         sum(case when winner ='NA' then 1 else 0 end) as no_result
16
18
19
        ((select
        year(date)as season, team1, team2, winner, result
        from matches)
21
23
        (Select
24
        year(date) as season, team2 as team1, team1 as team2, winner, result
26
        from matches))q1
        group by season, team)q2
28
         /*All basman scores in all matches*/
        select
         year(date) as season, date, id, city, venue, inning, batsman,
         sum(batsman_runs) as runs,
         ((sum(batsman_runs))*100/(sum(case when ((extras_type = 'NA') or (extras_type = 'byes') or (extras_type = 'legbyes')) then 1 else 0 end))) as strike_rate,
         sum(case when ((extras_type = 'NA') or (extras_type = 'byes') or (extras_type = 'legbyes')) then 1 else 0 end) as balls,
         sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
         sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
          batting_team as team,
13
          bowling_team as opponent,
         dense_rank() over(partition by year(date) order by date, id) as match_no,
15
         home, away
16
18
        (select
19
         i.id, i.inning, i.over, i.ball,i.batsman, i.batsman_runs, i.total_runs,
          i.is_wicket, i.batting_team, i.bowling_team, m.city,m.venue, m.date, m.winner,
21
          m.result, m.result_margin, m.team1 as home, m.team2 as away, i.extras_type, i.bowler
23
        ipl i cross join matches m on i.id=m.id)q1
24
         group by season, date, id, city, venue, inning, team, opponent, batsman, home, away
26
         order by season, date, id, inning, batsman, runs
28
31
        /*All inning scores in all matches*/
32 •
        select
        year(date) as season, date, id, city, venue, inning,
        sum(total_runs) as runs,
        round((sum(case when ((extras_type = 'NA') or (extras_type = 'byes') or (extras_type = 'legbyes')) then 1 else 0 end))/6) as overs,
        sum(case when ((extras_type = 'NA') or (extras_type = 'byes') or (extras_type = 'legbyes')) then 1 else 0 end) as balls,
        (case when team = winner then 1 else 0 end) as won,
37
         team as team,
39
         bowling_team as opponent,
40
         winner,
        dense_rank() over(partition by year(date) order by date, id) as match_no
42
43
45
        i.id, i.inning, i.over, i.ball, i.batsman, i.batsman runs, i.total runs,
         i.is_wicket, i.batting_team as team, i.bowling_team, m.city, m.date, m.winner,
47
         m.result, m.result_margin, i.extras_type, m.venue
48
50
        ipl i cross join matches m on i.id=m.id)q1
51
        group by season, date, id, city, venue, inning, team, opponent, winner
52
        order by season,date, id, inning, runs
53
        /*All Bowlers stats in each and every match*/
56 •
        select
        year(date) as season, date, id, inning, bowler,
        sum(total_runs) as runs,
59
        sum(is_wicket) as oute,
        sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
        sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
61
62
        sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
        sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
64
        sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
65
        sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
        sum(case when dismissal_kind = 'caught and bowled' then I else 0 end) as Caught_and_bowled,
sum(case when ((extras_type = 'NA') or (extras_type = 'byes') or (extras_type = 'legbyes')) then I else 0 end) as balls,
round((sum(case when ((extras_type = 'NA') or (extras_type = 'byes') or (extras_type = 'legbyes')) then I else 0 end))/6) as overs,
67
        sum(case when extras_type \circlearrowleft 'noballs' then (case when batsman_runs = 0 then 1 else 0 end) else 0 end) as dots, sum(case when batsman_runs = 1 then 1 else 0 end) as 1s,
        sum(case when batsman_runs = 2 then 1 else 0 end) as 2s,
        sum(case when batsman_runs = 3 then 1 else 0 end) as 3s,
        sum(case when batsman_runs = 4 then 1 else 0 end) as 4s,
        sum(case when batsman_runs = 6 then 1 else 0 end) as 6s,
75
        bowling team as team,
        batting_team as opponent,
        dense_rank() over(partition by year(date) order by date, id) as match_no
```

```
i.id, i.inning, i.over, i.ball,i.batsman, i.batsman_runs, i.total_runs,i.bowler, i.dismissal_kind,
 82
          i.is_wicket,i.extras_type, i.batting_team, i.bowling_team, m.city, m.date, m.winner,
          m.result, m.result_margin
 84
 85
         ipl i cross join matches m on i.id=m.id)q1
         group by season, date, id, inning, team, bowler, opponent order by season, date, id, inning, bowler, oute
 87
 88
 91
         /*Max, min, avg scores teamwise seasonwise*/
         select
 93
         season,team, max(runs),
         avg(runs) as average_score,
         min(runs) as minimum_score
         year(date) as season, date, id, inning,
 99
100
         sum(total runs) as runs, batting team as team,
         dense_rank() over(partition by year(date) order by date, id) as match_no
102
103
104
         i.id, i.inning, i.over, i.ball,i.batsman, i.batsman runs, i.total runs,
105
          i.is_wicket, i.batting_team, i.bowling_team, m.city, m.date, m.winner,
106
107
          m.result, m.result_margin
108
110
         ipl i cross join matches m on i.id=m.id)q1
         group by season, date, id, inning, team
111
         order by season,date, id, inning, runs)q2
         group by season, team
114
117
         /*30s, 50s, 100s teamwise and seasonwise*/
118 •
         select
119
         season, team,
120
         sum(case when (runs between 30 and 49) then 1 else 0 end) as 30s,
121
         sum(case when (runs between 50 and 99) then 1 else 0 end) as 50s,
         sum(case when (runs between 100 and 200) then 1 else 0 end) as 100s,
123
         sum(case when (runs between 150 and 200) then 1 else 0 end) as 150s
124
126
         (select
         year(date) as season, date, id, inning, batsman,
127
128
          sum(batsman_runs) as runs, batting_team as team,
129
         dense_rank() over(partition by year(date) order by date, id) as match_no
130
131
         (select
132
         i.id, i.inning, i.over, i.ball,i.batsman, i.batsman_runs, i.total_runs,
134
          i.is_wicket, i.batting_team, i.bowling_team, m.city, m.date, m.winner,
          m.result, m.result margin
135
137
         ipl i cross join matches m on i.id=m.id)q1
138
139
         group by season, date, id, inning, team, batsman
         order by season,date, id, inning, batsman, runs)q2
140
141
         group by season, team
142
143
146
         /*matches,runs,balls,strike rate, avg, best, dots, 1,2,3,4,5,6,30s, 50s, 100s playerwise, teamwise, and seasonwise*/
147 •
         select
149
         count(distinct id)as matches,
150
         sum(runs) as runs,
151
         sum(balls) as balls,
         (((sum(runs))*100)/(sum(balls))) as strike_rate,
(((sum(runs)))/(count(distinct id))) as average,
152
         max(runs) as best,
sum(dots) as dots,
154
155
         sum(1s) as 1s,
157
         sum(2s) as 2s,
158
         sum(3s) as 3s,
159
         sum(4s) as 4s,
         sum(6s) as 6s,
160
         sum(case when (runs between 30 and 49) then 1 else 0 end) as 30s,
162
         sum(case when (runs between 50 and 99) then 1 else 0 end) as 50s,
         sum(case when (runs between 100 and 200) then 1 else 0 end) as 100s,
163
164
         sum(case when (runs between 150 and 200) then 1 else 0 end) as 150s
165
167
        (select
         year(date) as season, date, id, inning, batsman,
168
169
         sum(batsman_runs) as runs,
         sum(case when ((extras_type = 'NA') or (extras_type = 'byes') or (extras_type = 'legbyes') or (extras_type = 'noballs')) then i else 0 end) as balls,
170
171
         sum(case when batsman_runs = 0 then 1 else 0 end) as dots,
         sum(case when batsman_runs = 1 then 1 else 0 end) as 1s,
         sum(case when batsman_runs = 2 then 1 else 0 end) as 2s,
```

```
sum(case when batsman_runs = 3 then 1 else 0 end) as 3s,
175
         sum(case when batsman_runs = 4 then 1 else 0 end) as 4s,
         sum(case when batsman runs = 6 then 1 else 0 end) as 6s,
176
178
         dense_rank() over(partition by year(date) order by date, id) as match_no
179
181
         (select
         i.id, i.inning, i.over, i.ball,i.batsman, i.batsman_runs, i.total_runs,
182
183
          i.is_wicket,i.extras_type, i.batting_team, i.bowling_team, m.city, m.date, m.winner,
184
          m.result, m.result margin
185
186
         ipl i cross join matches m on i.id=m.id)q1
187
         group by season, date, id, inning, team, batsmar
189
         order by season,date, id, inning, batsman, runs)q2
         group by season, team, batsman
190
191
192
         /*Upper plus all bat stats combined*/
196 •
         with c1 as (select
         season, batsman, batting team as team, matches, bat as total runs, balls,
197
         ((bat*100)/balls) as strike_rate,
199
         ((bat)/matches) as average_runs,
          wik as got out,
          fours,
201
202
          sixes,
          (matches-wik) as not_out,
204
         Caught,run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
205
207
             year(date) as season,batting_team, batsman, SUM(i.batsman_runs) AS bat, sum(is_wicket) as wik,
208
             sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
sum(case when dismissal kind = 'run out' then 1 else 0 end) as run out,
210
             sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
211
212
             sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
             sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
213
214
             sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
             sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
215
             sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
216
217
             sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing_the_field,
             sum(case when batsman runs = 4 then 1 else 0 end) as fours,
218
             sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
220
             sum(case when extras_type = 'MA' or extras_type = 'noballs' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
             count(distinct m.id) as matches
221
222
223
224
                 matches m cross join ipl i on m.id=i.id
                 group by season, batsman, batting_team)q1
225
226
                order by season, total_runs desc),
227
         c2 as (select
229
         count(distinct id)as matches,
230
         sum(runs) as runs,
231
          sum(balls) as balls,
232
         (((sum(runs))*100)/(sum(balls))) as strike rate,
         (((sum(runs)))/(count(distinct id))) as average,
         max(runs) as best,
sum(dots) as dots,
234
235
237
         sum(2s) as 2s.
238
         sum(3s) as 3s,
239
          sum(4s) as 4s,
240
         sum(6s) as 6s,
          sum(case when (runs between 30 and 49) then 1 else 0 end) as 30s,
         sum(case when (runs between 50 and 99) then 1 else 0 end) as 50s, sum(case when (runs between 100 and 200) then 1 else 0 end) as 100s,
242
243
          sum(case when (runs between 150 and 200) then 1 else 0 end) as 150s
245
247
         year(date) as season, date, id, inning, batsman,
248
         sum(batsman_runs) as runs,
         sum(case when ((extras_type = 'NA') or (extras_type = 'byes') or (extras_type = 'legbyes') or (extras_type = 'noballs')) then 1 else 0 end) as balls,
250
         sum(case when batsman_runs = 0 then 1 else 0 end) as dots,
251
252
         sum(case when batsman_runs = 1 then 1 else 0 end) as 1s,
         sum(case when batsman_runs = 2 then 1 else 0 end) as 2s,
253
         sum(case when batsman_runs = 3 then 1 else 0 end) as 3s,
255
         sum(case when batsman_runs = 4 then 1 else 0 end) as 4s,
         sum(case when batsman runs = 6 then 1 else 0 end) as 6s,
256
258
         dense_rank() over(partition by year(date) order by date, id) as match_no
259
260
261
         i.id, i.inning, i.over, i.ball,i.batsman, i.batsman_runs, i.total_runs,
263
          i.is_wicket,i.extras_type, i.batting_team, i.bowling_team, m.city, m.date, m.winner,
264
          m.result, m.result_margin
265
266
         ipl i cross join matches m on i.id=m.id)q1
267
268
         group by season, date, id, inning, team, batsman
269
         order by season, date, id, inning, batsman, runs)q2
         group by season, team, batsman)
271
         select * from c1 join c2 on c1.season=c2.season and c1.batsman=c2.batsman
272
```

```
/*Bowler wise ultimate stats*/
278 •
        select
279
        season,
280
281
         bowler,
        count(distinct id)as matches,
282
283
        sum(oute-run_out) as total_wickets,
284
        sum(runs) as runs,
         sum(balls) as balls,
286
        round(((sum(balls)/6))) as overs,
        ( case when sum(oute-run_out)=0 then sum(balls) else (sum(balls)/(sum(oute-run_out))) end) as strike_rate,
287
288
         ( case when sum(oute-run_out)=0 then sum(runs) else ((sum(runs))/(sum(oute-run_out))) end) as average,
        (sum(runs)/(sum(balls)/6)) as economy,
289
        max(oute-run_out) as Highest_Number_of_wickets_in_an_innings,
291
        sum(dots) as dots,
292
        sum(1s) as 1s,
        sum(2s) as 2s,
294
        sum(3s) as 3s.
295
        sum(4s) as 4s,
296
        sum(6s) as 6s,
        sum(wides) as wides,
297
299
        sum(Caught) as Caught,sum(run_out) as Run_out, sum(bowled) as Bowled, sum(lbw) as LBW, sum(stumped) as Stumped, sum(Caught_and_bowled) as Caught_and_Bowled
301
304
         year(date) as season, date, id, inning, bowler,
305
         sum(total runs) as runs,
         sum(is_wicket) as oute,
307
         sum(case when dismissal kind = 'caught' then 1 else 0 end) as Caught,
308
        sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
309
         sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
        sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
310
         sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
312
        sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
        sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
313
         sum(case when ((extras_type = 'NA') or (extras_type = 'byes') or (extras_type = 'legbyes')) then 1 else 0 end) as balls,
        sum(case when extras_type <>'noballs' then (case when batsman_runs = 0 then 1 else 0 end) else 0 end) as dots, sum(case when extras_type = 'wides' then 1 else 0 end) as wides,
315
316
317
         sum(case when extras_type = 'noballs' then 1 else 0 end) as noballs,
        sum(case when batsman runs = 1 then 1 else 0 end) as 1s,
318
         sum(case when batsman_runs = 2 then 1 else 0 end) as 2s,
320
        sum(case when batsman_runs = 3 then 1 else 0 end) as 3s,
        sum(case when batsman_runs = 4 then 1 else 0 end) as 4s,
321
         sum(case when batsman_runs = 6 then 1 else 0 end) as 6s,
323
        bowling team as team.
         dense_rank() over(partition by year(date) order by date, id) as match_no
325
        from
326
327
328
        i.id, i.inning, i.over, i.ball,i.batsman, i.batsman_runs, i.total_runs,i.bowler, i.dismissal_kind,
          i.is_wicket,i.extras_type, i.batting_team, i.bowling_team, m.city, m.date, m.winner,
329
330
         m.result, m.result_margin
331
332
333
         ipl i cross join matches m on i.id=m.id)q1
334
         group by season, date, id, inning, team, bowler
         order by season,date, id, inning, bowler, oute)q2
335
336
        group by season, team, bowler
337
339
         /*All inning scores in all matches*/
340
341 •
342
        year(date) as season, date, id, inning,
         sum(total_runs) as runs, batting_team as team, bowling_team as opponent,
344
         dense_rank() over(partition by year(date) order by date, id) as match_no
345
347
        (select
         i.id, i.inning, i.over, i.ball,i.batsman, i.batsman_runs, i.total_runs,
348
349
          i.is_wicket, i.batting_team, i.bowling_team, m.city, m.date, m.winner,
350
         m.result, m.result_margin
352
353
        ipl i cross join matches m on i.id=m.id)q1
         group by season, date, id, inning, team, opponent
355
         order by season, date, id, inning, runs
        /*All inning total scores and phasewise scores in all matches*/
        with cl as(select
         year(date) as season, date, id, inning,
         sum(total runs) as runs,
            sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
            sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
 11
         batting team as team, bowling team as opponent,
         dense_rank() over(partition by year(date) order by date, id) as match_no
 13
        from
 14
 15
 16
         i.id, i.inning, i.over, i.ball,i.batsman, i.batsman_runs, i.total_runs,
          i.is_wicket, i.batting_team, i.bowling_team, m.city, m.date, m.winner,
          m.result, m.result_margin, i.dismissal_kind, i.extras_type
 19
 21
        ipl i cross join matches m on i.id=m.id)al
        where q1.over between 0 and 5
 22
        group by season, date, id, inning, team, opponent
         order by season, date, id, inning, runs),
```

```
c2 as(select
          year(date) as season, date, id, inning,
 27
 28
          sum(total_runs) as runs, batting team as team, bowling_team as opponent,
          dense_rank() over(partition by year(date) order by date, id) as match_no
  31
 33
          i.id, i.inning, i.over, i.ball,i.batsman, i.batsman_runs, i.total_runs,
           i.is_wicket, i.batting_team, i.bowling_team, m.city, m.date, m.winner,
           m.result, m.result_margin
          ipl i cross join matches m on i.id=m.id)q1
  39
          where q1.over between 6 and 15
          group by season, date, id, inning, team, opponent
  41
          order by season, date, id, inning, runs),
  42
  44
          year(date) as season, date, id, inning,
          sum(total_runs) as runs, batting_team as team, bowling_team as opponent,
  45
          dense_rank() over(partition by year(date) order by date, id) as match_no
 47
 48
 49
         (select
          i.id, i.inning, i.over, i.ball,i.batsman, i.batsman_runs, i.total_runs,
 51
          i.is_wicket, i.batting_team, i.bowling_team, m.city, m.date, m.winner,
 52
          m.result, m.result margin
 54
 55
         ipl i cross join matches m on i.id=m.id)q1
 57
          group by season, date, id, inning, team, opponent
          order by season, date, id, inning, runs),
 60
         c4 as(select
         year(date) as season, date, id, city, venue, inning,
          sum(total_runs) as runs,
          sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
 63
             close when dismissal_kind = 'run out' then I else 0 end) as run_out,
sum(case when dismissal_kind = 'run out' then I else 0 end) as run_out,
sum(case when dismissal_kind = 'bowled' then I else 0 end) as bowled,
 65
              sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
 67
              sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
             sum(case when dismissal kind = 'stumped' then 1 else 0 end) as Stumped,
 68
             sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
             sum(case when dismissal_kind = 'hit wicket' then I else 0 end) as hit_wicket,
sum(case when dismissal_kind = 'obstructing the field' then I else 0 end) as obstructing_the_field,
sum(case when batsman_runs = 1 then I else 0 end) as singles,
 71
 73
74
              sum(case when batsman_runs = 2 then 1 else 0 end) as doubles,
              sum(case when batsman runs = 0 then 1 else 0 end) as dots,
              sum(case when batsman_runs = 3 then 1 else 0 end) as threes,
 76
              sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
 77
              sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
              sum(case when extras_type = 'NA' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
 79
          batting_team as team, bowling_team as opponent,
          dense_rank() over(partition by year(date) order by date, id) as match_no
 80
 82
 83
          i.id, i.inning, i.over, i.ball,i.batsman, i.batsman_runs, i.total_runs,
 85
          i.is_wicket, i.batting_team, i.bowling_team, m.city, m.date, m.winner, m.result, m.result_margin, m.venue, i.dismissal_kind, i.extras_type
 86
 88
          ipl i cross join matches m on i.id=m.id)q1
          group by season, date, id, city, venue, inning, team, opponent
          order by season, date, id, inning, runs)
 91
 93
          select *from(select
          c4.season, c4.date, c4.id,c4.city, c4.venue, c4.inning,
          c4.runs, c4.team, c4.opponent,
         c4.match_no, c1.runs as powerplay_score, c2.runs as middle_overs_score, c3.runs as death_overs_score,
          c4.Caught, c4.run_out, c4.bowled, c4.lbw, c4.retired_hurt, c4.Stumped, c4.Caught_and_bowled, c4.fours, c4.Sixes, c4.singles, c4.doubles, c4.dots, c4.threes, c4.balls
 99
         c4 left join c1 on c4.id=c1.id and c4.inning=c1.inning
          left join c2 on c1.id=c2.id and c1.inning=c2.inning
101
         left join c3 on c2.id=c3.id and c2.inning=c3.inning) we
102
```

```
/*Total Runs plus all bat stats combined*/
380 •
         with c1 as (select
381
          season, batsman,batting_team as team, matches, bat as total_runs, tor,balls,
382
          ((bat*100)/balls) as strike rate,
          ((bat)/matches) as average_runs,
384
           wik as got_out,
           fours,
385
387
           (matches-wik) as not out,
 388
          Caught,run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
 389
 390
392
              year(date) as season,batting_team, batsman, SUM(i.batsman_runs) AS bat, sum(total_runs) as tor, sum(is_wicket) as wik,
              sum(case when dismissal_kind = 'caught' then 1 else \theta end) as Caught, sum(case when dismissal_kind = 'run out' then 1 else \theta end) as run_out,
393
 395
              sum(case when dismissal kind = 'bowled' then 1 else 0 end) as bowled,
              sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
 397
              sum(case when dismissal\_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
              sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
 398
              sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled, sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
 400
 401
              sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing_the_field,
              sum(case when batsman_runs = 4 then 1 else 0 end) as fours, sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
 402
403
              sum(case when extras_type = 'NA' or extras_type = 'noballs' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
405
              count(distinct m.id) as matches
407
                  matches m cross join ipl i on m.id=i.id
409
                  group by season, batsman, batting_team)q1
410
                 order by season, total runs desc),
412
      ⊖ c2 as (select
         season, team, batsman,
413
          count(distinct id)as matches,
415
         sum(runs) as runs,
         sum(tor) as tor,
416
417
         sum(balls) as balls,
418
         (((sum(runs))*100)/(sum(balls))) as strike rate,
         (((sum(runs)))/(count(distinct id))) as average,
420
          max(runs) as best,
         sum(dots) as dots,
421
422
         sum(1s) as t1s,
423
         sum(2s) as t2s,
424
         sum(3s) as t3s,
425
         sum(4s) as t4s,
426
         sum(6s) as t6s,
         sum(case when (runs between 30 and 49) then 1 else 0 end) as t30s,
         sum(case when (runs between 50 and 99) then 1 else 0 end) as t50s,
sum(case when (runs between 100 and 200) then 1 else 0 end) as t100s,
428
429
          sum(case when (runs between 150 and 200) then 1 else 0 end) as t150s
431
433
         (select
         year(date) as season, date, id, inning, batsman,
435
          sum(batsman_runs) as runs,
         sum(total runs) tor,
436
437
          sum(case when ((extras_type = 'NA') or (extras_type = 'byes') or (extras_type = 'legbyes') or (extras_type = 'noballs')) then 1 else 0 end) as balls,
         sum(case when batsman_runs = 0 then 1 else 0 end) as dots,
sum(case when batsman_runs = 1 then 1 else 0 end) as 1s,
438
440
          sum(case when batsman_runs = 2 then 1 else 0 end) as 2s,
         sum(case when batsman_runs = 3 then 1 else 0 end) as 3s,
441
         sum(case when batsman_runs = 4 then 1 else 0 end) as 4s,
443
          sum(case when batsman_runs = 6 then 1 else 0 end) as 6s,
         batting team as team,
444
          dense_rank() over(partition by year(date) order by date, id) as match_no
446
         from
447
448
449
         i.id, i.inning, i.over, i.ball, i.batsman, i.batsman runs, i.total runs,
450
          i.is_wicket,i.extras_type, i.batting_team, i.bowling_team, m.city, m.date, m.winner,
451
          m.result, m.result_margin
452
454
         ipl i cross join matches m on i.id=m.id)q1
455
         group by season, date, id, inning, team, batsman
          order by season,date, id, inning, batsman, runs)q2
457
         group by season, team, batsman),
```

```
c3 as (select
460
         season, batsman, matches, bat as total_runs, tor, balls,
461
         ((bat*100)/balls) as strike rate,
         ((bat)/matches) as average_runs,
463
          wik as got_out,
464
          fours,
465
466
         Caught, run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
467
468
469
         (SELECT
             year(date) as season, batsman, SUM(i.batsman_runs) AS bat,sum(total_runs) as tor, sum(is_wicket) as wik,
             sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
471
472
             sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
474
             sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
             sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
475
             sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
             sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
477
             sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
478
479
             sum(case \ when \ dismissal\_kind = \ 'obstructing \ the \ field' \ then \ 1 \ else \ \theta \ end) \ as \ obstructing\_the\_field,
             sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
480
482
             sum(case when extras_type = 'NA' or extras_type = 'noballs' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
483
               count(distinct m.id) as matches
485
                 matches m cross join ipl i on m.id=i.id
487
488
                  group by season, batsman
490
                order by season, total_runs desc
         ),
491
493
         c4 as (select
         season, batsman, matches, bat as total_runs, tor, balls,
494
495
         ((bat*100)/balls) as strike_rate,
496
         ((bat)/matches) as average_runs,
          wik as got_out,
498
          fours,
499
         sixes.
         Caught,run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
501
502
504
             year(date) as season, batsman, SUM(i.batsman_runs) AS bat, sum(total_runs) as tor,sum(is_wicket) as wik,
505
             sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
             sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
507
             sum(case when dismissal_kind = 'bowled' then 1 else 0 end) as bowled,
             sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
508
             sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt, sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
509
510
511
             sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
512
             sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
             sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing_the_field,
             sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
514
515
             sum(case when extras_type = 'NA' or extras_type = 'noballs' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
517
               count(distinct m.id) as matches
518
519
520
                 matches m cross join ipl i on m.id=i.id
521
                 where i.over between 6 and 15
522
                  group by season, batsman
523
                 )q1
                order by season, total_runs desc ),
525
526
             c5 as(select
         season, batsman, matches, bat as total_runs, tor, balls,
528
         ((bat*100)/balls) as strike_rate,
529
         ((bat)/matches) as average_runs,
538
          wik as got_out,
531
          fours.
532
          sixes,
533
         Caught,run_out, bowled, lbw, retired_hurt, Stumped, Caught_and_bowled
534
536
         (SELECT
537
             year(date) as season, batsman, SUM(i.batsman runs) AS bat, sum(total runs) as tor, sum(is wicket) as wik,
             sum(case when dismissal_kind = 'caught' then 1 else 0 end) as Caught,
538
539
             sum(case when dismissal_kind = 'run out' then 1 else 0 end) as run_out,
             sum(case when dismissal kind = 'bowled' then 1 else 0 end) as bowled.
540
             sum(case when dismissal_kind = 'lbw' then 1 else 0 end) as lbw,
541
542
             sum(case when dismissal_kind = 'retired hurt' then 1 else 0 end) as retired_hurt,
             sum(case when dismissal_kind = 'stumped' then 1 else 0 end) as Stumped,
543
             sum(case when dismissal_kind = 'caught and bowled' then 1 else 0 end) as Caught_and_bowled,
545
             sum(case when dismissal_kind = 'hit wicket' then 1 else 0 end) as hit_wicket,
             sum(case when dismissal_kind = 'obstructing the field' then 1 else 0 end) as obstructing the field,
546
547
             sum(case when batsman_runs = 4 then 1 else 0 end) as fours,
548
             sum(case when batsman_runs = 6 then 1 else 0 end) as Sixes,
             sum(case when extras_type = 'NA' or extras_type = 'noballs' or extras_type = 'legbyes' or extras_type = 'byes' then 1 else 0 end) as balls,
550
                count(distinct m.id) as matches
551
553
                 matches m cross join ipl i on m.id=i.id
554
                 where i.over between 16 and 19
                 group by season, batsman
556
557
                order by season, total_runs desc
```

```
561
          c1.season, c1.batsman, c1.team, c1.matches, c1.total_runs as Runs, c1.tor,
          c1.balls, c1.got_out as dismissal, c1.strike_rate, c1.average_runs as average, c1.Caught,
562
563
          c1.run_out, c1.bowled, c1.lbw, c1.Stumped, c1.Caught_and_bowled,
564
          c2.best, c2.dots, c2.t1s, c2.t2s, c2.t3s, c2.t4s, c2.t6s,
565
          c2.t30s, c2.t50s, c2.t100s,
566
          c3.balls as pballs, c3.total_runs as pruns, c3.tor as pton, c3.strike_rate as pstrike, c3.got_out as pdismissal, c3.fours as pfours, c3.sixes as psixes,
567
         c4.balls as mballs, c4.total_runs as mruns,c4.tor as mtor, c4.strike_rate as mstrike, c4.got_out as mdismissal, c4.fours as mfours, c4.sixes as msixes, c5.balls as dballs, c5.total_runs as druns,c5.tor as dtor, c5.strike_rate as dstrike, c5.got_out as ddismissal, c5.fours as dfours, c5.sixes as dsixes
569
570
         c1 join c2 on c1.season=c2.season and c1.batsman=c2.batsman
         left join c3 on c2.season=c3.season and c2.batsman=c3.batsman
572
         left join c4 on c3.season=c4.season and c3.batsman=c4.batsman
         left join c5 on c4.season=c5.season and c4.batsman=c5.batsman
573
575
576 •
         select *, year(date) as season from matches;
577 •
578 •
         select *
579
         from matches
        /*All inning scores in all matches venue added*/
        select
        year(date) as season, date, id, city, inning,
        sum(total_runs) as runs,
        round((sum(case when ((extras_type = 'MA') or (extras_type = 'byes') or (extras_type = 'legbyes')) then 1 else 0 end))/6) as overs,
        sum(case when ((extras_type = 'MA') or (extras_type = 'byes') or (extras_type = 'legbyes')) then 1 else 0 end) as balls, batting_team as team, bowling_team as opponent,winner,
         dense_rank() over(partition by year(date) order by date, id) as match_no
10
12
        i.id, i.inning, i.over, i.ball,i.batsman, i.batsman_runs, i.total_runs,
13
         i.is_wicket, i.batting_team, i.bowling_team, m.city, m.venue, m.date, m.winner,
         m.result, m.result_margin, i.extras_type
15
16
17
        ipl i cross join matches m on i.id=m.id)q1
18
        group by season, date, id, city, inning, team, opponent, winner
        order by season, date, id, inning, runs
```