Query

1. CREATE TABLE matches(id int, city varchar, date date, player_of_match varchar, venue varchar, neutral_value int, team1 varchar, team2 varchar, toss_winner varchar, toss_decision varchar, winner varchar, result varchar, result_margin int, eliminator varchar, method varchar, umpire1 varchar, umpire2 varchar);

2. CREATE TABLE deliveries (match_id int, inning int, over int, ball int, batsman varchar, non_striker varchar, bowler varchar, batsman_runs int, extra_runs int, total_runs int, wicket_ball int, dismissal_kind varchar, player_dismissed varchar, fielder varchar, extras_type varchar, batting_team varchar, bowling_team varchar);

3. COPY matches FROM 'C:\Program Files\PostgreSQL\14\data\IPL\IPL_matches.csv' DELIMITER ',' CSV HEADER;
    SELECT * from matches;

4. COPY deliveries FROM 'C:\Program Files\PostgreSQL\14\data\IPL\IPL_Ball.csv' DELIMITER ',' CSV HEADER;
    SELECT * from deliveries;

5. SELECT * from deliveries limit 20;

6. SELECT * from matches limit 20;

7. SELECT * from matches where date = '2013-05-02';

8. SELECT * from matches where result_margin > 100;

9. SELECT * from matches where result = 'tie' order by date desc;

10. SELECT count(distinct city) from matches;

11. CREATE table deliveries_v02 as select *,
    CASE WHEN total_runs >= 4 then 'boundary'
     WHEN total_runs = 0 THEN 'dot'
    else 'other'
     END as ball_result
     FROM deliveries;

12. SELECT count(ball_result) from deliveries_v02 where ball_result='boundary';
    SELECT count(ball_result) from deliveries_v02 where ball_result='dot';
    SELECT count(ball_result) from deliveries_v02 where ball_result='other';

13. SELECT batting_team , count(ball_result) as boundary_count from deliveries_v02 where ball_result = 'boundary' group by batting_team order by boundary_count desc;

14. SELECT batting_team , count(ball_result) as dot_count from deliveries_v02 where ball_result = 'dot' group by batting_team order by dot_count desc;

15. SELECT dismissal_kind, count(dismissal_kind) as Dis_count from deliveries_v02 group by dismissal_kind order by Dis_count desc;

16. SELECT bowler, sum(extra_runs) as Total_Extra from deliveries_v02 group by bowler order by Total_Extra desc limit 5;

17. create table deliveries_v03 AS SELECT a.*, b.venue, b.match_date from deliveries_v02 as a
    left join (select max(venue) as venue, max(date) as match_date, id from matches group by id) as b
    on a.match_id = b.id;

18. SELECT venue, sum(total_runs) as TOTAL from deliveries_v03 group by venue order by TOTAL desc;

19. SELECT sum(total_runs) as totrun, extract(year from match_date) as my from deliveries_v03 where venue ='Eden Gardens' group by my order by totrun desc;

20. CREATE table matches_corrected as select *, replace(team1, 'Rising Pune Supergiants', 'Rising Pune Supergiant') as team1_corr
    , replace(team2, 'Rising Pune Supergiants', 'Rising Pune Supergiant') as team2_corr from matches;
    SELECT distinct team1_corr from matches_corrected;
    SELECT * from matches_corrected;

21. CREATE table deliveries_v04 as select concat(match_id,'-',inning,'-',over,'-',ball) as ball_id, * from deliveries_v03

22. SELECT count(distinct ball_id) from deliveries_v04;
    SELECT count(*) from deliveries_v04; --difference of 10 because it deleted all the duplicate value

23. CREATE table deliveries_v05 as select *, row_number() over (partition by ball_id) as r_num from deliveries_v04;

24. SELECT count(*) from deliveries_v05;
    SELECT sum(r_num) from deliveries_v05;
    SELECT * from deliveries_v05 order by r_num desc limit 20;
    SELECT * from deliveries_v05 WHERE r_num=2;

25. SELECT * FROM deliveries_v05 WHERE ball_id in (select BALL_ID from deliveries_v05 WHERE r_num=2);