--Task 1   
CREATE TABLE matches (   
match\_id int,   
city varchar,   
date date,   
player\_of\_match varchar,   
venue varchar,   
neutral\_venue int,   
team1 varchar,    
team2 varchar,    
toss\_winner varchar,    
toss\_decision varchar,    
winner varchar,   
result\_mode varchar,    
result\_margin int,   
eliminator varchar,   
method\_dl varchar,   
umpire1 varchar,    
umpire2 varchar   
);   
   
--Task 2   
drop table deliveries;   
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   
);   
   
--Task 3   
copy matches from 'C:\Program Files\PostgreSQL\13\data\IPL\IPL\_matches.csv' CSV header ;   
   
--Task 4   
copy deliveries from 'C:\Program Files\PostgreSQL\13\data\IPL\IPL\_Ball.csv' CSV header ;   
   
--Task 5   
select \* from deliveries limit 20;   
   
--Task 6   
select \* from matches limit 20;   
   
--Task 7   
select \* from matches where date = '02-05-2013';   
   
--Task 8   
select \* from matches where result\_mode = 'runs' and result\_margin > 100;   
   
--Task 9   
select \* from matches where result\_mode ='tie' order by date desc;   
   
--Task 10   
select count (distinct city) from matches;   
   
--Task 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;   
   
--Task 12   
select ball\_result, count (\*) from deliveries\_v02 group by ball\_result;   
   
--Task 13   
select batting\_team, count(\*) from deliveries\_v02 where ball\_result = 'boundary' group by batting\_team order by count desc;   
   
--Task 14   
select bowling\_team, count(\*) from deliveries\_v02 where ball\_result = 'dot' group by bowling\_team order by count desc;   
   
--Task 15   
select dismissal\_kind, count (\*) from deliveries where dismissal\_kind <> 'NA' group by dismissal\_kind order by count desc;   
   
--Task 16   
select bowler, sum(extra\_runs) as total\_extra\_runs from deliveries group by bowler order by total\_extra\_runs desc limit 5;   
   
--Task 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, match\_id from matches group by match\_id) as b   
on a.match\_id = b.match\_id;   
   
--Task 18   
select venue, sum(total\_runs) as runs from deliveries\_v03 group by venue order by runs desc;   
   
--Task 19   
select extract(year from match\_date) as IPL\_year, sum(total\_runs) as runs from  deliveries\_v03    
where venue = 'Eden Gardens' group by IPL\_year order by runs desc;   
   
--Task 20   
select distinct team1 from matches;   
   
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;   
   
--Task 21   
create table deliveries\_v04 as select concat(match\_id,'-',inning,'-',over,'-',ball) as ball\_id, \* from deliveries\_v03;   
   
--Task 22   
select \* from deliveries\_v04 limit 20;   
select count(distinct ball\_id) from deliveries\_v04;   
select count(\*) from deliveries\_v04;   
   
--Task 23   
drop table deliveries\_v05;   
create table deliveries\_v05 as select \*, row\_number() over (partition by ball\_id) as r\_num from deliveries\_v04;   
   
--Task 24   
select count(\*) from deliveries\_v05;   
select sum(r\_num) from deliveries\_v05;   
select \* from deliveries\_v05 order by r\_num  limit 20;   
select \* from deliveries\_v05 WHERE r\_num=2;   
   
--Task 25   
SELECT \* FROM deliveries\_v05 WHERE ball\_id in (select BALL\_ID from deliveries\_v05 WHERE r\_num=2);