**TEAM MEMBERS:**

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**FOR ITEM 3**

1. Print the name, club, and country name of all midfielder players whose country is 'USA'.

SELECT name,club,country

from players

where country='USA' AND

position='Midfielder';

1. Print the name, club, country and age of captains of each country participating in the 2014 world cup (this database)

SELECT name,club,country,floor (datediff(curdate(),dob)/365.25) as age

from players

where is\_captain='true';

1. Retrieve the names of countries participating in the 2014 world cup (this database) that have won the world cup more than twice.

SELECT country\_name

from country

where No\_of\_Worldcup\_won > 2;

1. Retrieve the names of countries participating in the 2014 world cup (this database) that have never won the world cup.

SELECT country\_name

from country

where (No\_of\_Worldcup\_won=0);

1. Retrieve the name and country of the player who had neither red cards nor yellow cards in the 2014 world cup.

SELECT p.name,p.country

from players as p, player\_card as c

where c.Yellow\_Cards=0 AND

c.Red\_Cards=0 AND

c.Player\_id=p.Player\_id;

1. Retrieve the name and country of the players with the most Red cards in the 2014 world cup.

SELECT name, country

from players p, player\_card c

where p.player\_id = c.player\_id AND

c.red\_cards = (SELECT MAX(red\_cards)

from player\_card);

1. For each Host city, retrieve the HostCity and the total number of games played in that city.

SELECT Host\_city, COUNT(\*) AS no\_of\_matches

from Match\_results

Group by (Host\_city);

1. Retrieve the names of host city with the most games played in that city.

SELECT Host\_city, COUNT(\*) as no\_of\_matches

from Match\_results

Group by (Host\_city)

Having no\_of\_matches = (SELECT MAX(x.matchs) from

(SELECT COUNT(\*) AS matchs

From Match\_results

Group by (Host\_city)) x) ;

1. For each country, retrieve the country name and the number of games they played as Team1 in the MATCH\_RESULTS table, and the total goals scored (SUM of Team1\_score) and the goals against (SUM of Team2\_score).

SELECT c.country\_name, count(\*) as NO\_OF\_MATCHES\_PLAYED,

SUM(m.Team1\_score) as total\_goals\_scored\_in\_Team1,

SUM(m.Team2\_score) as goals\_scored\_against\_Team2

from match\_results as m,country as c

where m.Team1=c.country\_name

group by c.country\_name;

1. For each country, retrieve the country name and the number of games they played as Team2 in the MATCH\_RESULTS table, and the total goals scored (SUM of Team12\_score) and the goals against (SUM of Team1\_score)

SELECT c.country\_name, count(\*) as NO\_OF\_MATCHES\_PLAYED ,

SUM(m.Team2\_score) as total\_goals\_scored\_in\_Team2,

SUM(m.Team1\_score) as goals\_scored\_against\_Team1

from match\_results as m,country as c

where m.Team2=c.country\_name

group by c.country\_name;

1. Write a query that combines the results of the queries in 9. and 10. To get the total number of games each country has played (either as Team1 or as Team2), their total goals scored and their total goals against. Create a view TEAM\_SUMMARY that has the following data attributes to hold the result of the combined query: CountryName, NoOfGames, TotalGoalsFor, TotalGoalsAgainst. Order in descending order of number of games played.

create view TEAM\_SUMMARY(CountryName,NoOfGames,TotalGoalsFor,TotalGoalsAgainst)

as

select country\_name,sum(NO\_OF\_MATCHES\_PLAYED) as games,sum(total\_goals\_scored),sum(goals\_scored\_against)

from(

(SELECT c.country\_name, count(\*) as NO\_OF\_MATCHES\_PLAYED ,SUM(m.Team1\_score)

as total\_goals\_scored,SUM(m.Team2\_score) as

goals\_scored\_against from match\_results as m,country as c

where m.Team1=c.country\_name group by c.country\_name )

union

(SELECT c.country\_name, count(\*) as NO\_OF\_MATCHES\_PLAYED ,SUM(m.Team2\_score)

as total\_goals\_scored,SUM(m.Team1\_score) as

goals\_scored\_against from match\_results as m,country as c

where m.Team2=c.country\_name group by c.country\_name))s group by

s.country\_name

order by games DESC;

1. For each match, print the date of match, name of team1, name of team2, name of winning team and goal difference between teams. Goal difference should be a positive value.

SELECT date\_of\_match,Team1,Team2,

Case

When Team1\_score > Team2\_score THEN Team1

When Team2\_score > Team1\_score THEN Team2

When (Team1\_score AND Team2\_score) = 0 THEN 'No result'

When Team1\_score = Team2\_score THEN 'Tie'

END as result

,abs(Team1\_score-Team2\_score) as goal\_diff

from match\_results;

1. Find all the matches played with country ‘Brazil’.

SELECT count(\*) + (SELECT count(\*)

from match\_results as M

where M.Team2='Brazil') AS Matches\_Played

from match\_results as R

where R.Team1='Brazil';

1. Retrieve the names of the players who have scored at least one goal, the player’s country, and the number of goals each player scored. Order the result by number of goals scored in descending order.

SELECT p.name,p.country,g.goals

from players p, player\_assists\_goals g

where p.Player\_id=g.Player\_id AND

g.goals>=1

order by goals DESC;

1. Repeat 14. But only for the players who have more than 2 goals.

SELECT p.name,p.country,g.goals

from players p, player\_assists\_goals g

where p.Player\_id=g.Player\_id AND

g.goals>2;

1. Make a list of participating countries and their population, ordered in descending order of population.

SELECT Country\_Name ,Population

from country

order by population DESC;

**FOR ITEM 4**

1) Execute 3 more Insert commands that attempt to insert 3 more records, such that the records violate the integrity constraints. Make each of the 3 records violate a different type of integrity constraint. Capture your commands in spool files for turning in.

(Occurs when a duplicate row is inserted into a table that has a unique constraint or index)

insert into players(Player\_id, Name, Fname, Lname, DOB, Country, Height(cms), Club, Position, Caps\_for\_Country, IS\_CAPTAIN) values (3408,’MARIO YEPES’,‘MARIO’,‘YEPES’,1976-01-13,‘Columbia’,186,’Atalanta Bergamo’,’ Goalkeeper’,97,1);

(occurs when primary key is null)

insert into players(Name, Fname, Lname, DOB, Country, Height(cms), Club, Position, Caps\_for\_Country, IS\_CAPTAIN) values (‘ROMEO YEPES’,’ROMEO’,’YEPES’,’1986-01-13’,’Columbia’,186,’Atalanta Bergamo’,’ Goalkeepe’,97,1);

(violates referential integrity constraints as there is no value with player id=95916 in the players table to which player\_card references to)

insert into player\_card(Player\_id , Yellow\_Cards, Red\_Cards) values (95916,0,0);

**FOR ITEM 5**

1) Execute a sql command to Delete a record that violates a referential integrity constraint. Capture your command in a spool file for turning in.

(violates referential constraints because several tuples exist in the tables MATCH\_RESULTS, PLAYER\_CARDS,PLAYER\_ASSISTS\_GOALS which have relations that reference the tuple being deleted from PLAYERS table.)

delete from players where Player\_id=184616;

**FOR ITEM 6**

1) Repeat 5, but Insert three new records that do not violate any integrity constraints. Capture your commands in spool files for turning in.

(The following queries are being successfully executed as they do not violate any integrity constraints)

insert into COUNTRY values (‘Singapore’,’5.6’,1,'John Lee');

insert into PLAYERS values ('654321','Chia Meller','Chia','Meller','1998-01- 01','Singapore',178,'Man Utd','Midfielder',35,0);

insert into player\_card values (‘654321’,2,0)

The queries along with the results and the explanation of each query has been recorded in the SPOOL file.