

Basic queries:

a) Show the basic information of a player (height, weight, position, etc.)

Select height,position

From players

Where name='XXX';

b) List all the players in a certain team

Select *

From players

Where clubID=' XXX';

c) List all the players playing the same position

Select *

From players

Where position=' XXX';

d) List all the players who are born before/after a certain date or the same date

Select *

From players

Where DOB='XXX';

e) List all the players in a certain league

Select *

From players

Where leagueid=' XXX';

f) Show the ranking of a league in a certain season

select hometeam as teamname,sum(ht_total_score) as score

from((Select hometeam ,count(*) *3 as ht_total_score

From match

Where FTR='H' and (day <'01-AUG-12' and day>'1-JUL-13') and div='D2'

Group by hometeam)union

(Select awayteam as teamname ,count(*) *3 as ht_total_score

From match

Where FTR='A' and (day <'01-AUG-12' and day>'1-JUL-13') and div='D2'

Group by awayteam))

group by hometeam

order by score desc

// Score Tables

select teamname,sum(ht_total_score) as points,sum(Games_playeds) as

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Games_playeds,sum(Wins) as Wins,sum(Draws)as Draws,SUM(LOSSES) AS
LOSSES, sum(Goals_for)as Goals_for,
        sum(Goals_Against)as Goals_Against
from((Select hometeam as teamname ,count(*) *3 as ht_total_score,count(*)as
Games_playeds, count(*) as Wins,sum(FTHG)as Goals_for,sum(FTAG)as
Goals_Against,
        Null as Draws,NULL AS LOSSES
From match
Where FTR='H' and (day <'01-JULY-13' and day>'01-AUGUST-12') and
div='D2'
Group by hometeam)union
(Select hometeam as teamname ,count(*) *1 as ht_total_score,count(*)as
Games_playeds,NULL ,sum(FTHG)as Goals_for,sum(FTAG)as
Goals_Against,count(*)as Draws,NULL AS LOSSES
From match
Where FTR='D' and (day <'01-JULY-13' and day>'01-AUGUST-12') and
div='D2'
Group by hometeam)union
(Select hometeam as teamname ,count(*) *0 as ht_total_score,count(*)as
Games_playeds,NULL ,sum(FTHG)as Goals_for,sum(FTAG)as
Goals_Against,NULL as Draws,COUNT (*)AS LOSSES
From match
Where FTR='A' and (day <'01-JULY-13' and day>'01-AUGUST-12') and
div='D2'
Group by hometeam)union
(Select awayteam as teamname ,count(*) *1 as ht_total_score,count(*)as
Games_playeds,NULL,sum(FTHG)as Goals_for,sum(FTAG)as
Goals_Against,count(*)as Draws,NULL AS LOSSES
From match
Where FTR='D' and (day <'01-JULY-13' and day>'01-AUGUST-12') and
div='D2'
Group by awayteam)union
(Select awayteam as teamname ,count(*) *3 as ht_total_score,count(*)as
Games_playeds,count(*) as Wins,sum(FTHG)as Goals_for,sum(FTAG)as
Goals_Against,Null as Draws,NULL AS LOSSES

```

From match

Where FTR='A' and (day <'01-JULY-13' and day>'01-AUGUST-12') and
div='D2'

Group by awayteam)union

(Select awayteam as teamname ,count(*) *0 as ht_total_score,count(*)as
Games_playeds,NULL ,sum(FTAG)as Goals_for,sum(FTHG)as
Goals_Against,NULL as Draws,COUNT (*)AS LOSSES

From match

Where FTR='H' and (day <'01-JULY-13' and day>'01-AUGUST-12') and
div='D2'

Group by awayteam))

group by teamname

order by points desc;

Basic queries are pretty simple to develop based on the existing data, we should pay more attention to the more interesting part: derive new information that is not directly stored in the database but could be derived from the data we have, so the following are the interesting queries:

- a) “Who owns who”, get the historical overall win/lose relation between two teams (which is always referenced when people want to make decisions on betting)

```

SELECT teamname,sum(win)as win,sum(draw)as draw,sum(lose)as lose
from ((SELECT a.teamname ,a.win ,b.draw,c.lose
FROM (Select hometeam as teamname, count(*) as  WIN
From match
Where (hometeam='Mannheim' and awayteam='F Koln')  and  FTR='H'
Group by hometeam)  a
,
(Select hometeam as teamname, count(*) as DRAW
From match
Where (hometeam='Mannheim' and awayteam='F Koln')  and  FTR='D'
Group by hometeam)  b
,
(Select hometeam as teamname, count(*) as  LOSE
From match
Where (hometeam='Mannheim' and awayteam='F Koln')  and  FTR='A'
Group by hometeam)  c
WHERE a.teamname=c.teamname and b.teamname=c.teamname )
union
(SELECT a.teamname ,a.win ,b.draw,c.lose
FROM (Select hometeam as teamname, count(*) as  WIN
From match
Where (hometeam='F Koln' and awayteam='Mannheim')  and  FTR='H'
Group by hometeam)  a
,
(Select hometeam as teamname, count(*) as DRAW
From match

```

```

Where (hometeam='F Koln' and awayteam='Mannheim') and FTR='D'
Group by hometeam) b
,
(Select hometeam as teamname, count(*) as LOSE
From match
Where (hometeam='F Koln' and awayteam='Mannheim') and FTR='A'
Group by hometeam) c
WHERE a.teamname=c.teamname and b.teamname=c.teamname )
union
(SELECT a.teamname ,a.win ,b.draw,c.lose
FROM (Select awayteam as teamname, count(*) as WIN
From match
Where (awayteam='Mannheim' and hometeam='F Koln') and FTR='A'
Group by awayteam) a
,
(Select awayteam as teamname, count(*) as DRAW
From match
Where (awayteam='Mannheim' and hometeam='F Koln') and FTR='D'
Group by awayteam) b
,
(Select awayteam as teamname, count(*) as LOSE
From match
Where (awayteam='Mannheim' and hometeam='F Koln') and FTR='H'
Group by awayteam) c
WHERE a.teamname=c.teamname and b.teamname=c.teamname )
union
(SELECT a.teamname ,a.win ,b.draw,c.lose
FROM (Select awayteam as teamname, count(*) as WIN
From match
Where (awayteam='F Koln' and hometeam='Mannheim') and FTR='A'
Group by awayteam) a
,
(Select awayteam as teamname, count(*) as DRAW
From match
Where (awayteam='F Koln' and hometeam='Mannheim') and FTR='D'

```

Group by awayteam) b

,

(Select awayteam as teamname, count(*) as LOSE

From match

Where (awayteam='F Koln' and hometeam='Mannheim') and FTR='H'

Group by awayteam) c

WHERE a.teamname=c.teamname and b.teamname=c.teamname))

group by teamname ;

- b) “Offend or defend”, show the “most offensive”/“least offensive” ranking of a league, which is a ranking of teams by goals scored in descending/ascending order

Most offensive:

Select teamname, sum(goals) as goals

From((Select hometeam as teamname,sum(FTHG) as goals

From match

Group by hometeam) union

(Select awayteam as teamname,sum(FTAG) as goals

From match

Group by awayteam))

Group by teamname

Order by goals desc;

- c) “Clash of the titans”, compare the number of championship titles of different teams, this can be done by calculating the number of seasons in which a team has a rank of 1 in the table

create view seasonXXXX as

select *

where (date>XXX and date<XXX)//

select teamname ,score

from (select hometeam as teamname,sum(ht_total_score) as score

from((Select hometeam ,count(*) *3 as ht_total_score

From match

Where FTR='H' /*and (day <'01-AUG-93' and day>'1-JUL-94')*/ and div='D2'

Group by hometeam)union

```

(Select awayteam as teamname ,count(*) *3 as ht_total_score
From match
Where FTR='A' /* and (day <'01-AUG-93' and day>'1-JUL-94')*/ and div='D2'
Group by awayteam))
group by hometeam
order by score desc)
where score=
(select max(score)from (select hometeam as teamname,sum(ht_total_score) as
score
from((Select hometeam ,count(*) *3 as ht_total_score
From match
Where FTR='H' /*and (day <'01-AUG-93' and day>'1-JUL-94')*/ and div='D2'
Group by hometeam)union
(Select awayteam as teamname ,count(*) *3 as ht_total_score
From match
Where FTR='A' /* and (day <'01-AUG-93' and day>'1-JUL-94')*/ and div='D2'
Group by awayteam))
group by hometeam
order by score desc))....
Select teamname sum(teamname)as number_of_champion
From (Season XXXX Union Season XXXX Union Season XXXX Union
Season XXXX .....Union Season XXXX)
Where teamname='xxx1' and teamname='xxx2'
Group by teamname;

```

d) “League aggressive power”, list the total amount of goals scored/conceded in a league in a certain season, and compare them, so we could know which league has the strongest offensive power

```

Select div as leaguname, sum(goals) as goals
From ((Select div ,sum(FTHG) as goals
From match
Group by div) union
(Select div ,sum(FTAG) as goals
From match

```

Group by div))

Group by div

Order by goals desc;

e) “How many”, show the total number of players in a league/in all the leagues.

Select leagueid ,count(firstname)as number_of_players

From players

Group by leagueid

order by number_of_players desc;

f) “The averages”, show the average of some specific data like: height, weight, goals scored, etc.

Select avg(height) as avg_height

From players ;

//etc, height

g) “King of half time”, compare the number of half-time goals of different teams.

Select teamname , sum(half_time_goals) as half_time_goals

From ((Select hometeam as teamname, sum(HTHG)as half_time_goals

From match

/*Where (day>XXX and day<XXX)*/

Group by hometeam)

union

(Select awayteam as teamname ,sum(HTAG)as half_time_goals

From match

/*Where (day>XXX and day<XXX)*/

Group by awayteam))

Group by teamname

order by half_time_goals desc;

h) “The unlucky”, list the most unlucky teams in each league(hitting woodwork the most)

select teamname ,hit_woodwork

from (Select teamname , sum(hit_woodwork) as hit_woodwork


```

From ((Select hometeam as teamname, sum(HHW)as hit_woodwork
From match
/*Where (day>XXX and day<XXX) and div ='XXX'*/
Group by hometeam) union
(Select awayteam as teamname ,sum(AHW)as hit_woodwork
From match
/*Where (day>XXX and day<XXX) and div ='XXX'*/
Group by awayteam))
Group by teamname )
where hit_woodwork=(select max(hit_woodwork)
from (Select teamname , sum(hit_woodwork) as hit_woodwork
From ((Select hometeam as teamname, sum(HHW)as hit_woodwork
From match
/*Where (day>XXX and day<XXX) and div ='XXX'*/
Group by hometeam) union
(Select awayteam as teamname ,sum(AHW)as hit_woodwork
From match
/*Where (day>XXX and day<XXX) and div ='XXX'*/
Group by awayteam))
Group by teamname ));

```

i) “Home dragon”, give the rank of teams in the order of their home goals

```

Select hometeam ,count(FTHG) as home_goals
From match
/*Where div='XXX' and (day>XXX and day<XXX) */
Group by hometeam
order by home_goals desc ;

```

j) “Beware the yellow/red card!”, compare the number of yellow/red cards
between teams/leagues

```

Select teamname ,sum (Yellow_cards) as Yellow_cards
From ((Select hometeam as teamname,sum(HY)as Yellow_cards
From match
Group by hometeam) union
(Select awayteam as teamname ,sum(HY)as Yellow_cards
From match

```

Group by awayteam))

Group by teamname

order by Yellow_cards desc ;

k) “What a pity”, list the number of offside of different teams

Select teamname ,sum (offside) as offside

From ((Select hometeam as teamname,sum(HO)as offside

From match

/*Where (day>XXX and day<XXX)*/

Group by hometeam) union

(Select awayteam as teamname ,sum(HO)as offside

From match

/*Where (day>XXX and day<XXX)*/

Group by awayteam))

/*Where div='XXX' and (day>XXX and day<XXX)*/

Group by teamname

order by offside desc;

l) “Hi corner flag”, compare the total number of corners ny each team

Select teamname ,sum (corners) as corners

From ((Select hometeam as teamname,sum(HC)as corners

From match

/*Where (day>XXX and day<XXX)*/

Group by hometeam) union

(Select awayteam as teamname ,sum(HC)as corners

From match

/*Where (day>XXX and day<XXX)*/

Group by awayteam))

/*Where div='XXX' /*Where (day>XXX and day<XXX)*/

Group by teamname

order by corners desc;