CS3700 Introduction to Database Systems Assignment 3: SQL on Group DB CS18B050 Aniswar Srivatsa Krishnan

1)

## Description:

Obtain the leaderboard for the tournament, i.e, get the number of wins for each team sorted in the descending order of wins.

# Query:

```
select team_name, T.c as wins
from
(select result_winning_team_id, count(*) as c
from Matches
group by result_winning_team_id) as T, Team
where T.result_winning_team_id = team_id
order by wins desc;
```

### Result:

+	++
team name	wins
÷	++
Mumbai Indians	80
Chennai Super Kings	i 79 i
Royal Challengers Bangalore	i 69 i
Kolkata Knight Riders	i 68 i
Kings XI Punjab	61 i
Rajasthan Royals	61 j
Delhi Daredevils	i 56 i
Sunrisers Hyderabad	i 33 i
Deccan Chargers	i 29 i
Pune Warriors	i 12 i
Gujarat Lions	j 9 j
Kochi Tuskers Kerala	i 6 i
Rising Pune Supergiants	j 5 j
+	· 

2)

Description:

Obtain the list of names of orange cap holders (highest run-scorer in a particular year of the tournament) for each year along with the runs that they have scored.

### Query:

#### Result:

	year	score
SE Marsh	2008	616
ML Hayden	2009	572
SR Tendulkar	2010	617
CH Gayle	2011	604
CH Gayle	2012	733
MEK Hussey	2013	733
RV Uthappa	2014	660
DA Warner	2015	562
V Kohli	2016	969

# 3)

### Description:

Obtain the head-to-head wins in the tournament across the years (i.e, for each pair of teams, what is the number of times each team has won when the match was played between the pair of teams).

```
Query:
create view head_to_head1 as
      select T1.team name as team 1, T2.team name as team 2,
      Sum(case when m.result winning team id = T1.team id then 1 else 0 end) as
team_1_wins,
      Sum(case when m.result winning team id = T2.team id then 1 else 0 end) as
team 2 wins
      from Team T1, Team T2, Matches m
      where m.played by team id1 = T1.team id and m.played by team id2 = T2.team id
and T1.team id < T2.team id
      group by team 1, team 2;
create view head to head2 as
      select T1.team_name as team_1, T2.team_name as team_2,
      Sum(case when m.result_winning_team_id = T1.team_id then 1 else 0 end) as
team_1_wins,
      Sum(case when m.result_winning_team_id = T2.team_id then 1 else 0 end) as
team 2 wins
      from Team T1, Team T2, Matches m
      where m.played by team id1 = T1.team id and m.played by team id2 = T2.team id
and T1.team id > T2.team id
      group by team_1, team_2;
select h1.team 1, h1.team 2, (h1.team 1 wins + h2.team 2 wins) as team 1 wins,
(h2.team_1_wins + h1.team_2_wins) as team_2_wins
      from head to head1 h1, head to head2 h2
      where h1.team_1 = h2.team_2 and h1.team_2 = h2.team_1
      order by rand();
```

Result:

+			+
team_1	team_2	team_1_wins	team_2_wins
Valkata Vaight Didaga	Buna Wanniana		++
Kolkata Knight Riders	Pune Warriors	4	<u> </u>
Rajasthan Royals	Pune Warriors	4	<u> </u>
Rajasthan Royals	Kochi Tuskers Kerala	<u>.</u>	1
Chennai Super Kings	Pune Warriors	4	2
Royal Challengers Bangalore		9	6
Rajasthan Royals	Sunrisers Hyderabad	4	3
Delhi Daredevils	Mumbai Indians	9	9
Kolkata Knight Riders	Kings XI Punjab	13	6
Kolkata Knight Riders	Sunrisers Hyderabad	6	3
Royal Challengers Bangalore	Deccan Chargers	5	6
Pune Warriors	Sunrisers Hyderabad	0	2
Kolkata Knight Riders	Gujarat Lions	0	2
Chennai Super Kings	Delhi Daredevils	11	5
Royal Challengers Bangalore	Kochi Tuskers Kerala	2	0
Delhi Daredevils	Deccan Chargers	7	4
Rajasthan Royals	Delhi Daredevils	10	6
Kings XI Punjab	Sunrisers Hyderabad	2	6 j
Sunrisers Hyderabad	Gujarat Lions	3	0 і
Royal Challengers Bangalore		8	11
Kolkata Knight Riders	Delhi Daredevils	10	7
Rajasthan Royals	Mumbai Indians	6	10
Mumbai Indians	Deccan Chargers	6	4
Kolkata Knight Riders	Mumbai Indians	5	13
Mumbai Indians	Rising Pune Supergiants	1	1

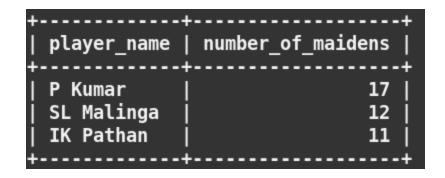
### 4)

# Description:

Obtain the names of the top 3 bowlers according to the number of maiden overs (i.e., overs with 0 runs conceded) that they have bowled and the number of maiden overs they bowled.

### Query:

# Result:



### 5)

### Description:

Obtain the name of a player such that he is the only player from his country.

#### Query:

```
select p2.player_name, T.nationality
from
(select p1.nationality, count(p1.player_name) as number_of_people
from Player p1
group by p1.nationality) as T, Player p2
where T.number_of_people = 1 and T.nationality = p2.nationality;
```

### Result:

### 6)

### Description:

Obtain the names of players who have scored atleast 2000 runs and taken atleast 75 wickets along with the runs scored and the number of wickets taken by them.

#### Query:

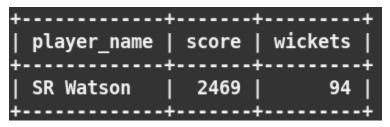
```
create view runs_scored as
select striker, sum(runs_scored) as score
from Ball_stats group by striker;

create view wickets_taken as
select bowler, count(*) as wickets
from Ball_stats
```

where wicket\_type is NOT NULL group by bowler;

```
select p.player_name, r.score, w.wickets
from Player p, runs_scored r, wickets_taken w
where r.striker = w.bowler and r.score >= 2000 and w.wickets >= 75 and p.player_id =
r.striker;
```

### Result:



Note: There are outputs that contain more than 50 rows. Only the top 10 rows are shown here for the sake of brevity.