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FIFA WORLD CUP
Qatar2022

Importance of world cup database:

Why did we create the database?

- For easy retrieval of World Cup data when needed.

- Record all statistics, such as the tournament's top scorers and team performances.

- Monitor penalties, fouls, and warnings given to players.

- Track teams that advanced to the knockout stages.

- Record the champions, runner-ups, and third-place teams.

- Analyze data to identify trends in player and team performance across tournaments.

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Requirements:

- Each team has a unique name, FIFA_ranking, championships_Won.
- We keep track of the points, goal_out, goal_in and match_played in each group.
- Each team must be related to one Coach and must one Group.
- A team must have many Players, participate in many Matches, and win one Award.
- Each group has a unique Name.
- Each group must be related to multiple teams.
- Each coach has a unique Ssn, Name, and Nationality.
- Each coach is related to one team.
- Each player has a unique Ssn, F_name, L_name, Number, position, and B_date.
- Each player is related to one Team.
- A player can win multiple Awards and participate in many matches
- We keep track of the rate, status, punch, and number_of_goals in each match.

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Requirements (cont.):

- Each award has a unique ID, Name and award has won only one time.
- Each award must be related to one Player and must one Team.
- Each stadium has a unique Name, location, Capacity, and Opened_year.
- We keep track of the Number_of_attendees in each match.
- A stadium can host many matches.
- Each match has a unique Number, Round, Time, Date and final_type.
- Each match must be related to one Stadium and must multiple Teams.
- Each referee has a unique Ssn, Name, and Nationality.
- A referee can officiate multiple matches in different roles.

- Each entry records a match between two teams (Team_name1 and Team_name2) with their respective scores (Score_team1 and Score_team2).

FIFA WORLD CUP
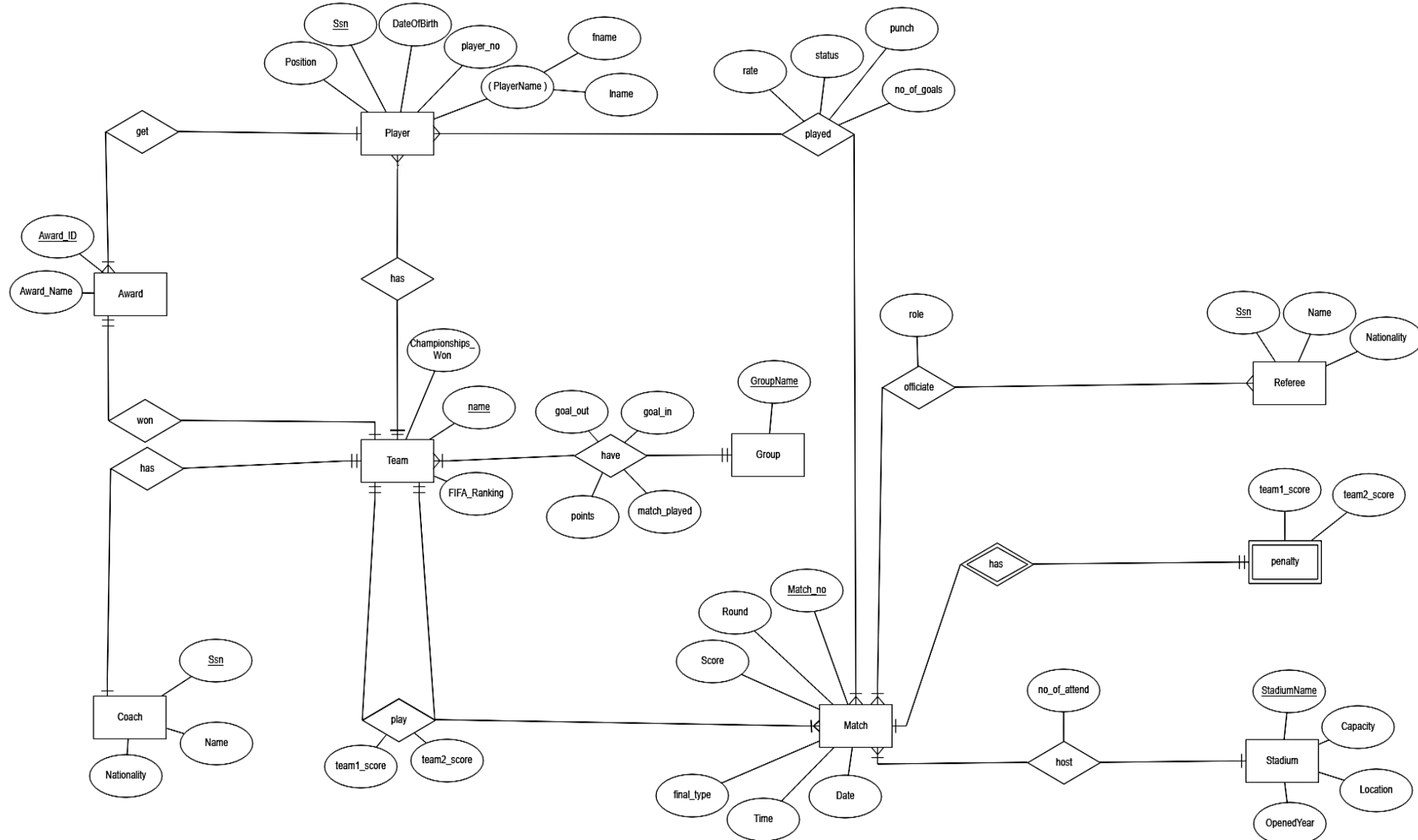Qatar2022

Requirements (cont.):

- Each penalty record includes the team1_score and team2_score.
- Each match may be has a penalty or not where penalty must be related to match if occurred.

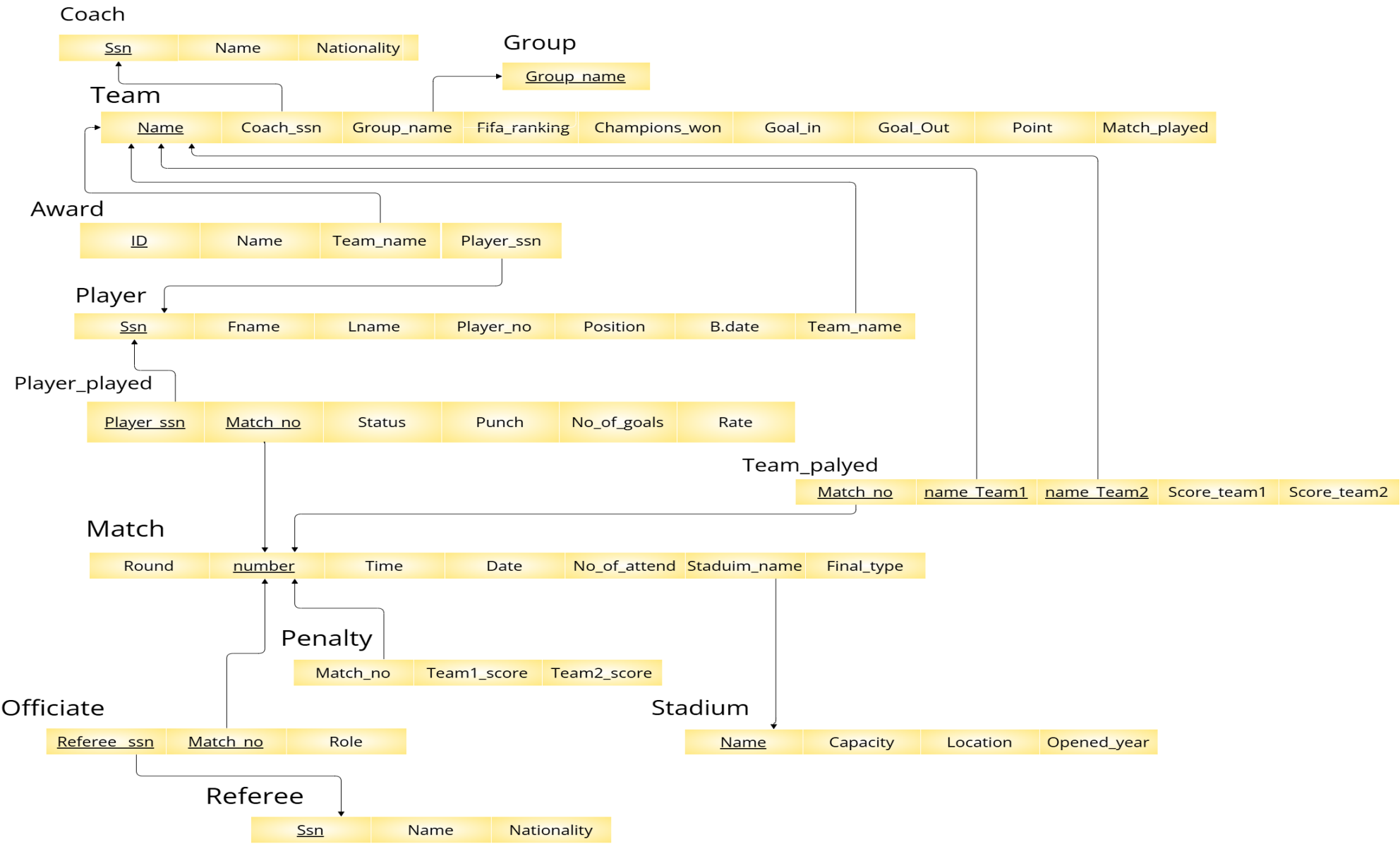**After understanding the requirements of World Cup database create its ER model.**

ER-Diagram:

Relational Model (Mapping):
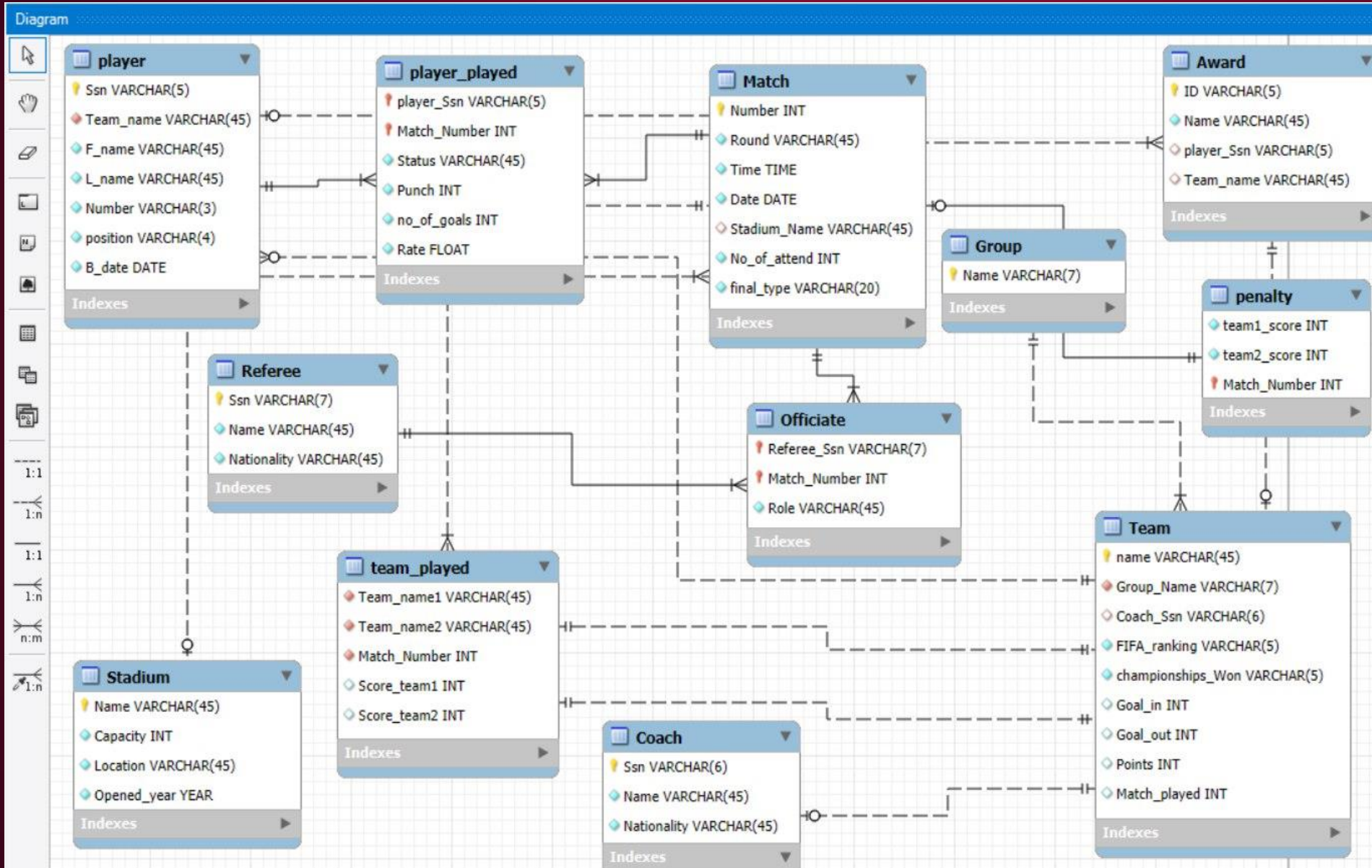
Coach

Ssn	Name	Nationality

Group

Group_name

Team

Name	Coach_ssn	Group_name	Fifa_ranking	Champions_won	Goal_in	Goal_Out	Point	Match_played

Award

ID	Name	Team_name	Player_ssn

Player

Ssn	Fname	Lname	Player_no	Position	B.date	Team_name

Player_played

Player_ssn	Match_no	Status	Punch	No_of_goals	Rate

Team_palyed

Match_no	name_Team1	name_Team2	Score_team1	Score_team2

Match

Round	number	Time	Date	No_of_attend	Staduim_name	Final_type

Penalty

Match_no	Team1_score	Team2_score

Officiate

Referee_ssn	Match_no	Role

Stadium

Name	Capacity	Location	Opened_year

Referee

Ssn	Name	Nationality

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ER-Diagram on Work-Bench:

Match:

Number	Round	Time	Date	Stadium_Name	No_of_attend	final_type
1	Group A	13:00:00	2022-11-20	Al Bayt Stadium	60000	regular
2	Group A	16:00:00	2022-11-20	Lusail Iconic Stadium	88000	regular
3	Group B	19:00:00	2022-11-21	Khalifa International Stadium	45000	regular
4	Group B	22:00:00	2022-11-21	Al Thumama Stadium	40000	regular
5	Group C	13:00:00	2022-11-22	Education City Stadium	45000	regular
6	Group C	16:00:00	2022-11-22	Stadium 974	40000	regular
7	Group D	19:00:00	2022-11-23	Al Janoub Stadium	44000	regular
8	Group D	22:00:00	2022-11-23	Ahmed Bin Ali Stadium	44000	regular
9	Group E	13:00:00	2022-11-24	Lusail Iconic Stadium	88000	regular
10	Group E	16:00:00	2022-11-24	Al Bayt Stadium	60000	regular
11	Group F	19:00:00	2022-11-24	Khalifa International Stadium	45000	regular
12	Group F	22:00:00	2022-11-24	Al Thumama Stadium	40000	regular
13	Group G	13:00:00	2022-11-25	Education City Stadium	45000	regular
14	Group G	16:00:00	2022-11-25	Stadium 974	40000	regular
15	Group H	19:00:00	2022-11-26	Al Janoub Stadium	44000	regular
16	Group H	22:00:00	2022-11-26	Ahmed Bin Ali Stadium	44000	regular
17	Group A	13:00:00	2022-11-27	Lusail Iconic Stadium	88000	regular
18	Group A	16:00:00	2022-11-27	Al Bayt Stadium	60000	regular
19	Group B	19:00:00	2022-11-28	Khalifa International Stadium	45000	regular
20	Group B	22:00:00	2022-11-28	Al Thumama Stadium	40000	regular
21	Group C	13:00:00	2022-11-29	Education City Stadium	45000	regular
22	Group C	16:00:00	2022-11-29	Stadium 974	40000	regular
23	Group D	19:00:00	2022-11-30	Al Janoub Stadium	44000	regular
24	Group D	22:00:00	2022-11-30	Ahmed Bin Ali Stadium	44000	regular
25	Group E	13:00:00	2022-12-01	Lusail Iconic Stadium	88000	regular
26	Group E	16:00:00	2022-12-01	Al Bayt Stadium	60000	regular

Penalty:

team1_score	team2_score	Match_Number
1	3	54
3	0	55
4	2	57
4	3	58
4	2	64
NULL	NULL	NULL

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Player:

Ssn	Team_name	F_name	L_name	Number	position	B_date
P001	Argentina	Lionel	Messi	10	FWD	1987-06-24
P002	France	Kylian	Mbappé	7	FWD	1998-12-20
P003	Brazil	Neymar	Junior	10	FWD	1992-02-05
P004	Croatia	Luka	Modrić	10	MID	1985-09-09
P005	Portugal	Cristiano	Ronaldo	7	FWD	1985-02-05
P006	Argentina	Rodrigo	De Paul	7	MID	1994-05-24
P007	Argentina	Julián	Álvarez	9	FWD	2000-01-31
P008	France	Hugo	Lloris	1	GK	1986-12-26
P009	France	Raphaël	Varane	4	DEF	1993-04-25
P010	Brazil	Alisson	Becker	1	GK	1992-10-02
P011	Brazil	Gabriel	Jesus	9	FWD	1997-04-03
P012	Croatia	Marcelo	Brozović	11	MID	1992-11-16
P013	Croatia	Josko	Gvardiol	20	DEF	2002-01-23
P014	Portugal	Rúben	Dias	3	DEF	1997-05-14
P015	Portugal	João	Felix	11	FWD	1999-11-10
P016	England	Jude	Bellingham	22	MID	2003-06-29
P017	England	Jordan	Pickford	1	GK	1994-03-07
P018	Spain	Ferran	Torres	11	FWD	2000-02-29
P019	Spain	Sergio	Busquets	5	MID	1988-07-16
P020	Germany	Thomas	Müller	13	FWD	1989-09-13
P021	Germany	Manuel	Neuer	1	GK	1986-03-27
P022	Netherlands	Memphis	Depay	10	FWD	1994-02-13
P023	Netherlands	Frenkie	De Jong	21	MID	1997-05-12
P024	Belgium	Romelu	Lukaku	9	FWD	1993-05-13
P025	Belgium	Thibaut	Courtois	1	GK	1992-05-11
P026	Uruguay	Edinson	Cavani	21	FWD	1987-02-14

player 1 ×
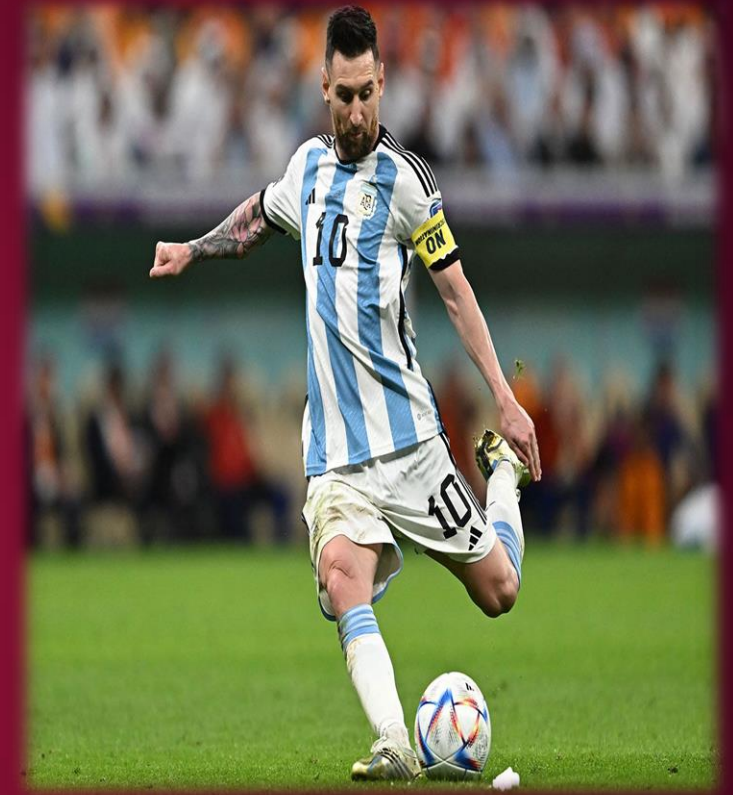
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Team_Played:

Team_name1	Team_name2	Match_Number	Score_team1	Score_team2
Qatar	Ecuador	1	0	2
Senegal	Netherlands	2	1	2
England	Iran	3	6	2
USA	Wales	4	1	1
Argentina	Saudi Arabia	5	1	2
Denmark	Tunisia	6	0	0
Mexico	Poland	7	0	0
France	Australia	8	4	1
Morocco	Croatia	9	0	0
Belgium	Canada	10	1	0
Spain	Costa Rica	11	7	0
Germany	Japan	12	1	2
Costa Rica	Japan	13	0	1
Belgium	Morocco	14	0	2
Croatia	Canada	15	4	1
Brazil	Serbia	16	2	0
Switzerland	Cameroon	17	1	0
Uruguay	South Korea	18	0	0
Portugal	Ghana	19	3	2
Brazil	Switzerland	20	1	0
Cameroon	Serbia	21	3	3
South Korea	Ghana	22	2	3
Portugal	Uruguay	23	2	0
Netherlands	Ecuador	24	1	1
England	USA	25	0	0
Iran	Wales	26	0	2

eam_played 1 ×

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Coach:

Ssn	Name	Nationality
C1	Félix Sánchez	Qatar
C10	Hervé Renard	Saudi Arabia
C11	Gerardo Martino	Mexico
C12	Czesław Michniewicz	Poland
C13	Didier Deschamps	France
C14	Graham Arnold	Australia
C15	Kasper Hjulmand	Denmark
C16	Jalel Kadri	Tunisia
C17	Luis Enrique	Spain
C18	Hansi Flick	Germany
C19	Hajime Moriyasu	Japan
C2	Gustavo Alfaro	Ecuador
C20	Luis Fernando Suárez	Costa Rica
C21	Roberto Martínez	Belgium
C22	John Herdman	Canada
C23	Walid Regragui	Morocco
C24	Zlatko Dalić	Croatia
C25	Tite	Brazil
C26	Dragan Stojković	Serbia
C27	Murat Yakin	Switzerland
C28	Rigobert Song	Cameroon
C29	Fernando Santos	Portugal
C3	Louis van Gaal	Netherlands
C30	Otto Addo	Ghana
C31	Diego Alonso	Uruguay
C32	Paulo Bento	South Korea

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Stadium:

Name	Capacity	Location	Opened_year
Ahmad Bin Ali Stadium	40000	Al Rayyan	2020
Al Bayt Stadium	60000	Al Khor	2021
Al Janoub Stadium	40000	Al Wakrah	2020
Al Thumama Stadium	40000	Doha	2021
Education City Stadium	45000	Al Rayyan	2020
Khalifa International Stadium	40000	Doha	1976
Lusail Iconic Stadium	80000	Lusail	2021
Stadium 974	40000	Doha	2021
NULL	NULL	NULL	NULL

Al Janoub

Al Bayt

Ahmad Bin Ali

Education City

Al Thumama

Stadium 974

Khalifa International

Lusail Iconic

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Group:

	Name
▶	Group A
	Group B
	Group C
	Group D
	Group E
	Group F
	Group G
	Group H
*	NULL

Group A

- Qatar
- Ecuador
- Senegal
- Netherlands

Group B

- England
- IR Iran
- USA
- Wales

Group C

- Argentina
- Saudi Arabia
- Mexico
- Poland

Group D

- France
- Denmark
- Tunisia
- Australia

Group E

- Spain
- Germany
- Japan
- Costa Rica

Group F

- Belgium
- Canada
- Morocco
- Croatia

Group G

- Brazil
- Serbia
- Switzerland
- Cameroon

Group H

- Portugal
- Ghana
- Uruguay
- Korea Republic

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Referee:

Ssn	Name	Nationality
20001	Daniele Orsato	Italy
20002	Antonio Mateu Lahoz	Spain
20003	Clement Turpin	France
20004	Michael Oliver	England
20005	Szymon Marciniak	Poland
20006	Jesus Valenzuela	Venezuela
20007	Wilton Sampaio	Brazil
20008	Cesar Ramos	Mexico
20009	Raphael Claus	Brazil
20010	Danny Makkelie	Netherlands
20011	Ismail Elfath	USA
20012	Facundo Tello	Argentina
20013	Fernando Rapallini	Argentina
20014	Christopher Beath	Australia
20015	Abdulrahman Al-Jassim	Qatar
20016	Victor Gomes	South Africa
20017	Mustapha Ghorbal	Algeria
20018	Ivan Barton	El Salvador
20019	Kevin Ortega	Peru
20020	Bakary Gassama	Gambia
20021	Mohammed Abdulla …	UAE
20022	Salima Mukansanga	Rwanda
20023	Stephanie Frappart	France
20024	Yoshimi Yamashita	Japan
20025	Kathryn Nesbitt	USA
20026	Mahmoud Al Banna	Egypt

referee 1 ✕

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Player_Played:

player_Ssn	Match_Number	Status	Punch	no_of_goals	Rate
P002	60	Starter	1	1	8.2
P008	60	Starter	0	0	8.1
P016	60	Starter	0	0	7.9
P075	60	Starter	0	1	7.8
P079	60	Starter	1	0	7.5
P001	61	Starter	2	1	9.5
P004	61	Starter	0	0	8.0
P046	61	Starter	0	1	8.2
P049	61	Starter	3	0	7.7
P101	61	Starter	0	0	8.5
P002	62	Starter	1	1	8.5
P008	62	Starter	0	0	8.1
P034	62	Starter	0	0	7.8
P062	62	Starter	0	0	7.6
P075	62	Starter	0	0	7.9
P004	63	Starter	0	0	7.6
P012	63	Starter	0	0	7.5
P034	63	Starter	0	1	8.0
P062	63	Starter	1	0	7.7
P001	64	Starter	0	2	9.5
P002	64	Starter	0	3	9.6
P007	64	Starter	0	0	8.2
P008	64	Starter	0	0	8.1
P074	64	Starter	0	1	8.4
P075	64	Starter	0	1	7.8
P101	64	Starter	0	0	8.5

player_played 2 ×

Note in punch:
0→ No card
1→ Yellow card
2→ Two yellow cards (leading to a red card)
3→ Direct red card

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Officiate:

Referee_Ssn	Match_Number	Role
20001	1	Main Referee
20002	1	Assistant Referee 1
20003	1	Assistant Referee 2
20004	1	Fourth Official
20005	1	VAR
20006	2	Main Referee
20007	2	Assistant Referee 1
20008	2	Assistant Referee 2
20009	2	Fourth Official
20010	2	VAR
20011	3	Main Referee
20012	3	Assistant Referee 1
20013	3	Assistant Referee 2
20014	3	Fourth Official
20015	3	VAR
20016	4	Main Referee
20017	4	Assistant Referee 1
20018	4	Assistant Referee 2
20019	4	Fourth Official
20020	4	VAR
20021	5	Main Referee
20022	5	Assistant Referee 1
20023	5	Assistant Referee 2
20024	5	Fourth Official
20025	5	VAR
20026	6	Main Referee

officiate 1 ✕

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Award:

ID	Name	player_Ssn	Team_name
A001	Golden Ball	P001	Argentina
A002	Golden Boot	P002	France
A003	Golden Glove	P101	Argentina
A004	Best Young Player	P016	England
A005	FIFA Fair Play Trophy	NULL	England
A006	FIFA World Cup Trophy	NULL	Argentina
NULL	NULL	NULL	NULL

Golden Ball

Best Player

Golden Boot

Top Goal Scorer

Golden Glove

Best Goalkeeper

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Team:

name	Group_Name	Coach_Ssn	FIFA_ranking	championships_Won	Goal_in	Goal_out	Points	Match_played
Argentina	Group C	C9	A	2	5	2	6	3
Australia	Group D	C14	D	0	3	4	6	3
Belgium	Group F	C21	A	0	1	2	4	3
Brazil	Group G	C25	A	5	3	1	6	3
Cameroon	Group G	C28	C	0	4	4	4	3
Canada	Group F	C22	D	0	2	7	0	3
Costa Rica	Group E	C20	D	0	3	11	3	3
Croatia	Group F	C24	B	2	4	1	5	3
Denmark	Group D	C15	B	0	1	3	1	3
Ecuador	Group A	C9	D	0	4	3	4	3
England	Group B	C5	A	0	9	2	7	3
France	Group D	C13	A	2	6	3	6	3
Germany	Group E	C18	B	4	6	5	4	3
Ghana	Group H	C30	D	0	5	7	3	3
Iran	Group B	C6	C	0	4	7	3	3
Japan	Group E	C19	C	0	4	3	6	3
Mexico	Group C	C11	B	0	2	3	4	3
Morocco	Group F	C23	C	0	4	1	7	3
Netherlands	Group A	C3	B	0	5	1	7	3
Poland	Group C	C12	C	0	2	2	4	3
Portugal	Group H	C29	A	1	6	4	6	3
Qatar	Group A	C31	A	0	1	7	0	3
Saudi Arabia	Group C	C10	D	0	3	5	3	3
Senegal	Group A	C4	C	1	5	4	6	3
Serbia	Group G	C26	D	0	5	8	1	3
South Korea	Group H	C32	C	0	4	4	4	3

team 1 ×

FIFA WORLD CUP
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QUERIES

1.Some Query from one table:

- Retrieve all details of matches that took place at the 'Lusail Iconic Stadium'

```sql
1    /*Retrieve all details of matches that took place at the 'Lusail Iconic Stadium'*/
2    
3 •  SELECT *
4    FROM `match`
5    WHERE Stadium_Name = 'Lusail Iconic Stadium';
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Number	Round	Time	Date	Stadium_Name	No_of_attend	final_type
2	Group A	16:00:00	2022-11-20	Lusail Iconic Stadium	88000	regular
9	Group E	13:00:00	2022-11-24	Lusail Iconic Stadium	88000	regular
17	Group A	13:00:00	2022-11-27	Lusail Iconic Stadium	88000	regular
25	Group E	13:00:00	2022-12-01	Lusail Iconic Stadium	88000	regular
34	Group A	16:00:00	2022-11-21	Lusail Iconic Stadium	88000	regular
41	Group E	13:00:00	2022-11-25	Lusail Iconic Stadium	88000	regular
50	Round of 16	22:00:00	2022-12-03	Lusail Iconic Stadium	88000	regular
57	Quarter-finals	18:00:00	2022-12-09	Lusail Iconic Stadium	88000	penalty
61	Semi-finals	22:00:00	2022-12-13	Lusail Iconic Stadium	88000	regular
64	Final	18:00:00	2022-12-18	Lusail Iconic Stadium	88000	penalty
NULL	NULL	NULL	NULL	NULL	NULL	NULL

FIFA WORLD CUP
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QUERIES

- **Find all matches where the "Al" is part of the stadium name**

```sql
1
2    -- Find all matches where the "Al" is part of the stadium name.
3  • SELECT distinct Stadium_Name
4    FROM `match`
5    WHERE Stadium_Name LIKE '%Al%';
6
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Stadium_Name
Ahmed Bin Ali Stadium
Al Bayt Stadium
Al Janoub Stadium
Al Thumama Stadium
Khalifa International Stadium

FIFA WORLD CUP
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QUERIES

- **Retrieve all players from Argentina team**

```
1       /*Retrieve all players from Argentina team*/
2 •     SELECT F_name, L_name, number ,position
3       FROM Player
4       WHERE Team_name = 'Argentina';
5
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

F_name	L_name	number	position
Lionel	Messi	10	FWD
Rodrigo	De Paul	7	MID
Julián	Álvarez	9	FWD
Lautaro	Martínez	22	FWD
Ángel	Di María	11	FWD
Emiliano	Martínez	23	GK

FIFA WORLD CUP
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QUERIES

- **Teams with more than 3 points and fewer than 3 goals out**

```
1    -- Teams with more than 3 points and fewer than 3 goals out
2 •  SELECT name as team_name, Points, Goal_out
3    FROM Team
4    WHERE Points > 3 AND Goal_out < 3;
5
6
```

team_name	Points	Goal_out
Argentina	6	2
Belgium	4	2
Brazil	6	1
Croatia	5	1
England	7	2
Morocco	7	1
Netherlands	7	1
Poland	4	2
Tunisia	4	1
Uruguay	4	2
USA	5	1

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

FIFA WORLD CUP
Qatar2022

QUERIES

- Retrieve all details the team_played who The result of all matchs ended 1 - 1

```
1    -- Retrieve all details the team_played who The result of all matchs ended 1 - 1
2 •  SELECT *
3    from team_played
4    where Score_team1=1 and Score_team2=1
5
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Team_name1	Team_name2	Match_Number	Score_team1	Score_team2
USA	Wales	4	1	1
Netherlands	Ecuador	24	1	1
Spain	Germany	31	1	1
Japan	Croatia	54	1	1
Croatia	Brazil	57	1	1

FIFA WORLD CUP
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QUERIES

- **Retrieve the winner team of the world cup**

```sql
1    -- Retrieve the winner team of the world cup
2•   select team_name , name as award_name
3    from award
4    where name="FIFA World Cup Trophy";
5
6
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: 🔠

team_name	award_name
Argentina	FIFA World Cup Trophy

QUERIES

2. Some Query from Many Tables:

- **Retrieve the rate of all player in final match**

```
1    --    Retrieve the rate of all player in final match
2•   select distinct x.F_name, x.L_name, p.Rate
3    from player_played p, player x
4    where p.Match_Number='64' and x.Ssn=p.player_Ssn
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

F_name	L_name	Rate
Lionel	Messi	9.5
Kylian	Mbappé	9.6
Julián	Álvarez	8.2
Hugo	Lloris	8.1
Ángel	Di María	8.4
Olivier	Giroud	7.8
Emiliano	Martínez	8.5

FIFA WORLD CUP
Qatar2022

QUERIES

- **Get all matches with the names of the stadium (Stadium 974) and the teams that played**

```
1    -- Get all matches with the names of the stadium (Stadium 974) and the teams that played
2 •  select  m.Number, m.stadium_name as stadium_name, t.Team_name1, t.Team_name2
3    from `match` m ,team_played t
4    where t.Match_Number=m.Number and stadium_name="Stadium 974"
5
6
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: IA

Number	stadium_name	Team_name1	Team_name2
6	Stadium 974	Denmark	Tunisia
14	Stadium 974	Belgium	Morocco
22	Stadium 974	South Korea	Ghana
30	Stadium 974	Tunisia	Australia
38	Stadium 974	South Korea	Portugal
46	Stadium 974	Serbia	South Korea
54	Stadium 974	Japan	Croatia

FIFA WORLD CUP
Qatar2022

QUERIES

- **Retrieve match_number , referee_name , Role , name team1 and name team2 where match ended with penalty**

```sql
1    -- Retrieve match_number , referee_name , Role , name team1
2    -- and name team2 where match ended with penalty
3 •  select m.Number as match_number , r.Name as referee_name , o.Role ,t.Team_name1 ,t.Team_name2
4    from referee r,officiate o, `match` m , team_played t
5    where r.ssn = o.Referee_Ssn and o.Match_Number=m.Number
6    and t.Match_Number=m.Number and m.final_type="penalty"
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

match_number	referee_name	Role	Team_name1	Team_name2
54	Mahmoud Al Banna	Main Referee	Japan	Croatia
54	Adham Makhadmeh	Assistant Referee 1	Japan	Croatia
54	Ali Al-Tarifi	Assistant Referee 2	Japan	Croatia
54	Maguette Ndiaye	Fourth Official	Japan	Croatia
54	Matthew Conger	VAR	Japan	Croatia
55	Daniele Orsato	Main Referee	Morocco	Spain
55	Antonio Mateu Lahoz	Assistant Referee 1	Morocco	Spain
55	Clement Turpin	Assistant Referee 2	Morocco	Spain
55	Michael Oliver	Fourth Official	Morocco	Spain

Result 2 x

FIFA WORLD CUP
Qatar2022

QUERIES

- **Retrieve name of coach that train Spain and his match palyed**

```sql
1    -- retrive name of coach that train Spain and his match palyed
2 •  select c.Name  ,p.Match_Number , p.Team_name1, p. Team_name2
3    from coach c, team t , team_played p
4    where c.Ssn= t.Coach_Ssn
5     and (t.name=Team_name1 or t.name=Team_name2 )
6     and c.name='Luis Enrique'
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Name	Match_Number	Team_name1	Team_name2
Luis Enrique	11	Spain	Costa Rica
Luis Enrique	31	Spain	Germany
Luis Enrique	40	Japan	Spain
Luis Enrique	44	Spain	Costa Rica
Luis Enrique	55	Morocco	Spain

Result 1 ×

FIFA WORLD CUP
Qatar2022

QUERIES

- **Retrieve the player recieved direct red card on specific match n round and stadium name**

```sql
1    -- Retrieve the player recieved direct red card on specific match n round and stadium name
2 •  select p.F_name,p.L_name, p.Team_name,pp.Match_Number ,m.round ,m.Stadium_Name
3    from player_played pp , player p , `match`m
4    where pp.player_Ssn=p.ssn and pp.Match_Number=m.Number and Punch=3; -- 3->dirct res card
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: ͞A

F_name	L_name	Team_name	Match_Number	round	Stadium_Name
Raphaël	Varane	France	29	Group G	Education City Stadium
Alisson	Becker	Brazil	20	Group B	Al Thumama Stadium
Manuel	Neuer	Germany	43	Group F	Khalifa International Stadium
Romelu	Lukaku	Belgium	14	Group G	Stadium 974
Guillermo	Ochoa	Mexico	7	Group D	Al Janoub Stadium
Achraf	Hakimi	Morocco	14	Group G	Stadium 974
Piotr	Zieliński	Poland	7	Group D	Al Janoub Stadium
Richarlison	de Andrade	Brazil	57	Quarter-finals	Lusail Iconic Stadium

Result 7 ✕

QUERIES

- **Retrieve the first name, last name, and award name for all players who have received an award**

```sql
1   -- Retrieve the first name, last name, and award name for all players who have received an award
2 • SELECT
3       player.F_name AS FirstName,
4       player.L_name AS LastName,
5       award.Name AS AwardName
6   FROM  player join award ON player.Ssn = award.player_Ssn;
7
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: 🔠

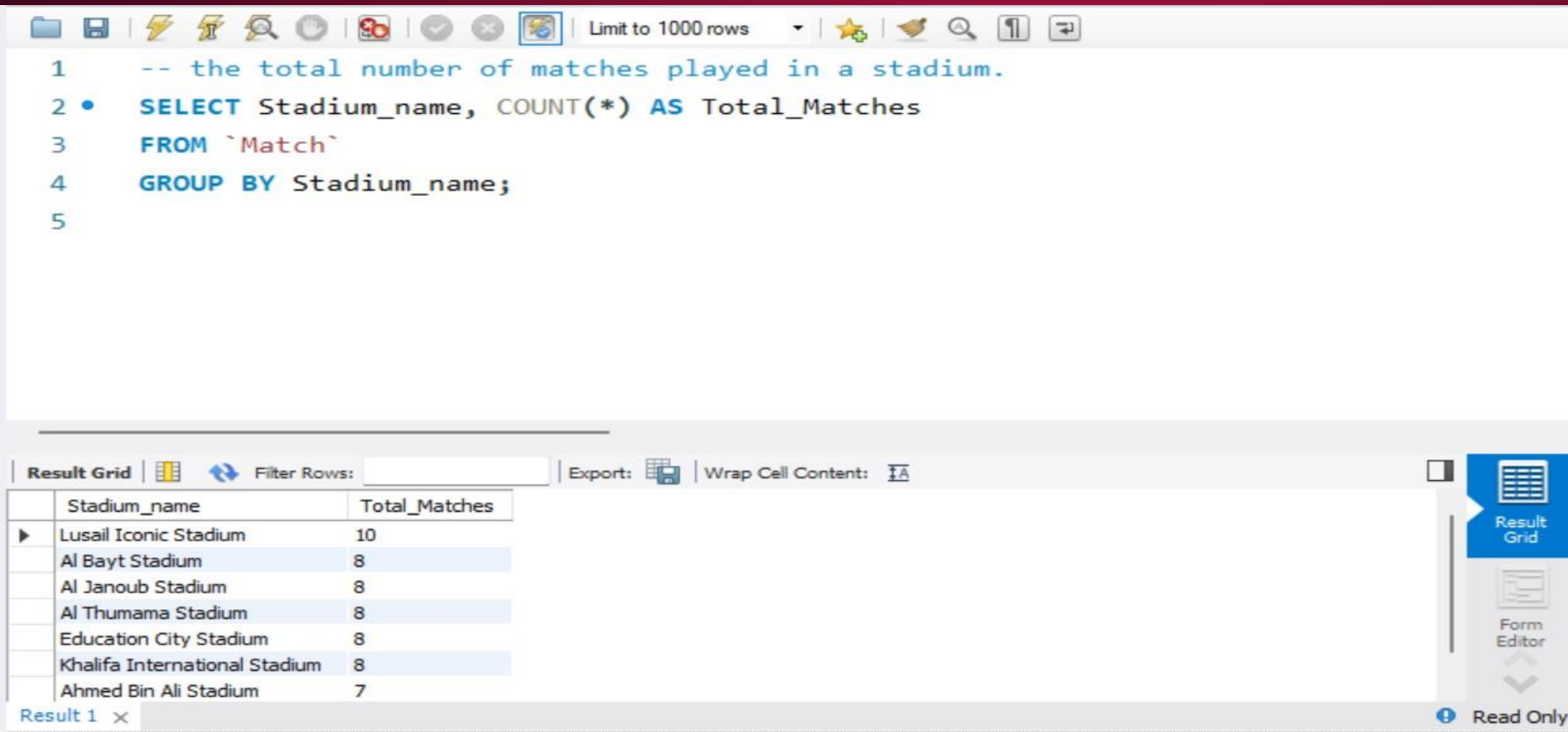| FirstName	LastName	AwardName
Lionel	Messi	Golden Ball
Kylian	Mbappé	Golden Boot
Emiliano	Martínez	Golden Glove
Jude	Bellingham	Best Young Player

FIFA WORLD CUP
Qatar2022

QUERIES

3. Some Query Using Aggregate Functions and having or grouping or order by :

- Retrieve the total number of matches played in a stadium.


```sql
1    -- the total number of matches played in a stadium.
2 •  SELECT Stadium_name, COUNT(*) AS Total_Matches
3    FROM `Match`
4    GROUP BY Stadium_name;
5
```

Stadium_name	Total_Matches
Lusail Iconic Stadium	10
Al Bayt Stadium	8
Al Janoub Stadium	8
Al Thumama Stadium	8
Education City Stadium	8
Khalifa International Stadium	8
Ahmed Bin Ali Stadium	7

QUERIES

- Retrieve the total goals for each player Descending Order.

```sql
1    -- Retrieve the total goals for each player
2  • select p.f_name,p.L_name,sum(pp.no_of_goals)  as total_goal
3    from player p , player_played pp
4    where pp.player_Ssn=p.ssn
5    group by p.F_name,p.L_name
6    order by sum(pp.no_of_goals) desc;
7
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

f_name	L_name	total_goal
Kylian	Mbappé	8
Lionel	Messi	7
Neymar	Junior	4
Achraf	Hakimi	4
Cristiano	Ronaldo	4
Olivier	Giroud	2
Bruno	Fernandes	2
Aleksandar	Mitrović	2
Lautaro	Martínez	2

Result 8 ×

FIFA WORLD CUP
Qatar2022

QUERIES

- list the number of matches of players with team name Descending Order

```
2    -- list the number of matches of players with team name
3 •  select p.F_name,p.L_name,t.name as team_name ,count(*) as no_of_games
4    from player p,player_played pp,team t
5    where pp.player_Ssn=p.Ssn and p.Team_name=t.name
6    group by p.F_name,p.L_name,t.name
7    order by 4 desc
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

F_name	L_name	team_name	no_of_games
Achraf	Hakimi	Morocco	7
Lionel	Messi	Argentina	6
Hugo	Lloris	France	6
Luka	Modrić	Croatia	6
Emiliano	Martínez	Argentina	6
Kylian	Mbappé	France	5
Hakim	Ziyech	Morocco	5
Cristiano	Ronaldo	Portugal	5
Mateo	Kovačić	Croatia	4

Result 4 ×

FIFA WORLD CUP
Qatar2022

QUERIES

- list the total number of matches greater than 4 of each team and their Fifa Rank using having

```
1    -- list the total number of matches greater than 4 of each team and thier Fifa Rank using having
2 •  SELECT Team.Name AS TeamName, COUNT(tp.Match_Number) AS MatchesPlayed, Team.FIFA_ranking
3    FROM Team
4    INNER JOIN team_played tp
5    ON Team.Name = tp.Team_Name1 or  Team.Name = tp.Team_Name2
6    GROUP BY Team.name
7    HAVING COUNT(tp.Match_Number) > 4
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: ‡A

TeamName	MatchesPlayed	FIFA_ranking
Argentina	6	A
Belgium	5	A
Brazil	6	A
Costa Rica	6	D
Croatia	9	B
France	6	A
Japan	5	C
Morocco	8	C
Portugal	6	A
South Korea	6	C

Result 7 ×

FIFA WORLD CUP
Qatar2022

QUERIES

- **Retrive the top score player in all matches**

```
1    -- Retrive the top score player in all matches
2  • SELECT x.F_name,x.L_name,SUM(no_of_goals) as total_goal
3    FROM Player_played p , player x
4    where x.ssn=p.player_Ssn
5    GROUP BY x.ssn
6    order by SUM(no_of_goals) desc
7    limit 1
8
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

F_name	L_name	total_goal
Kylian	Mbappé	8

FIFA WORLD CUP
Qatar2022

QUERIES

3. Some Nested Query:

- Calculate the total goals scored by each player who scored more than the average goals of all players using having and nested

```sql
1    -- Calculate the total goals scored by each player
2    -- who scored more than the average goals of all players
3    -- using having and nested
4  • SELECT  p.F_name, p.L_name  ,SUM(pp.no_of_goals) AS Total_Goals
5    FROM player p
6    INNER JOIN player_played pp
7    ON p.Ssn = pp.player_Ssn
8    GROUP BY  p.F_name, p.L_name
9    HAVING Total_Goals > ( select AVG(no_of_goals)
10                                    from player_played )
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

F_name	L_name	Total_Goals
Lionel	Messi	7
Kylian	Mbappé	8
Neymar	Junior	4
Luka	Modrić	1
Cristiano	Ronaldo	4
Gabriel	Jesus	2

Result 1 ×

FIFA WORLD CUP
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QUERIES

- **Find the top scorer in a specific match using a nested query**

```sql
1    -- Find the top scorer in a specific match using a nested query
2 •  select p.F_name, p.L_name, pp.no_of_goals ,pp.Match_Number
3    from player_played pp
4    join player p on pp.player_Ssn = p.Ssn
5    where  pp.no_of_goals = (select MAX(no_of_goals)
6                                    from player_played
7                                                    )
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

F_name	L_name	no_of_goals	Match_Number
Kylian	Mbappé	3	64

QUERIES

4. Some Random Query:

- **retrieves player names, team names, the number of total goals, and total number of matches,whether the players participated in any matches or not.**

```sql
1    --  retrieves player names, team names, the number of total goals, and total number of matches,
2    -- whether the players participated in any matches or not.
3  • SELECT p.F_name AS Player_First_Name,
4         p.L_name AS Player_Last_Name,
5         t.name AS Team_Name,
6         sum(pp.no_of_goals) AS Total_Goals,
7         count(pp.Match_Number) AS number_of_matches
8    FROM (player p LEFT JOIN player_played pp ON p.Ssn = pp.player_Ssn)
9    JOIN team t ON p.Team_name = t.name
10   GROUP BY p.F_name, p.L_name, t.name;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Player_First_Name	Player_Last_Name	Team_Name	Total_Goals	number_of_matches
Aaron	Mooy	Australia	0	2
Achraf	Hakimi	Morocco	4	7
Akram	Afif	Qatar	NULL	0
Aleksandar	Mitrović	Serbia	2	3
Ali	Maâloul	Tunisia	0	2
Alireza	Jahanbakhsh	Iran	1	2
Alisson	Becker	Brazil	0	2
Almoez	Ali	Qatar	NULL	0
Alphonso	Davies	Canada	0	2

Result 8 ✕

QUERIES

- Retrieve match details from Group A, where the referee's name starts with "M", ordered by the match number
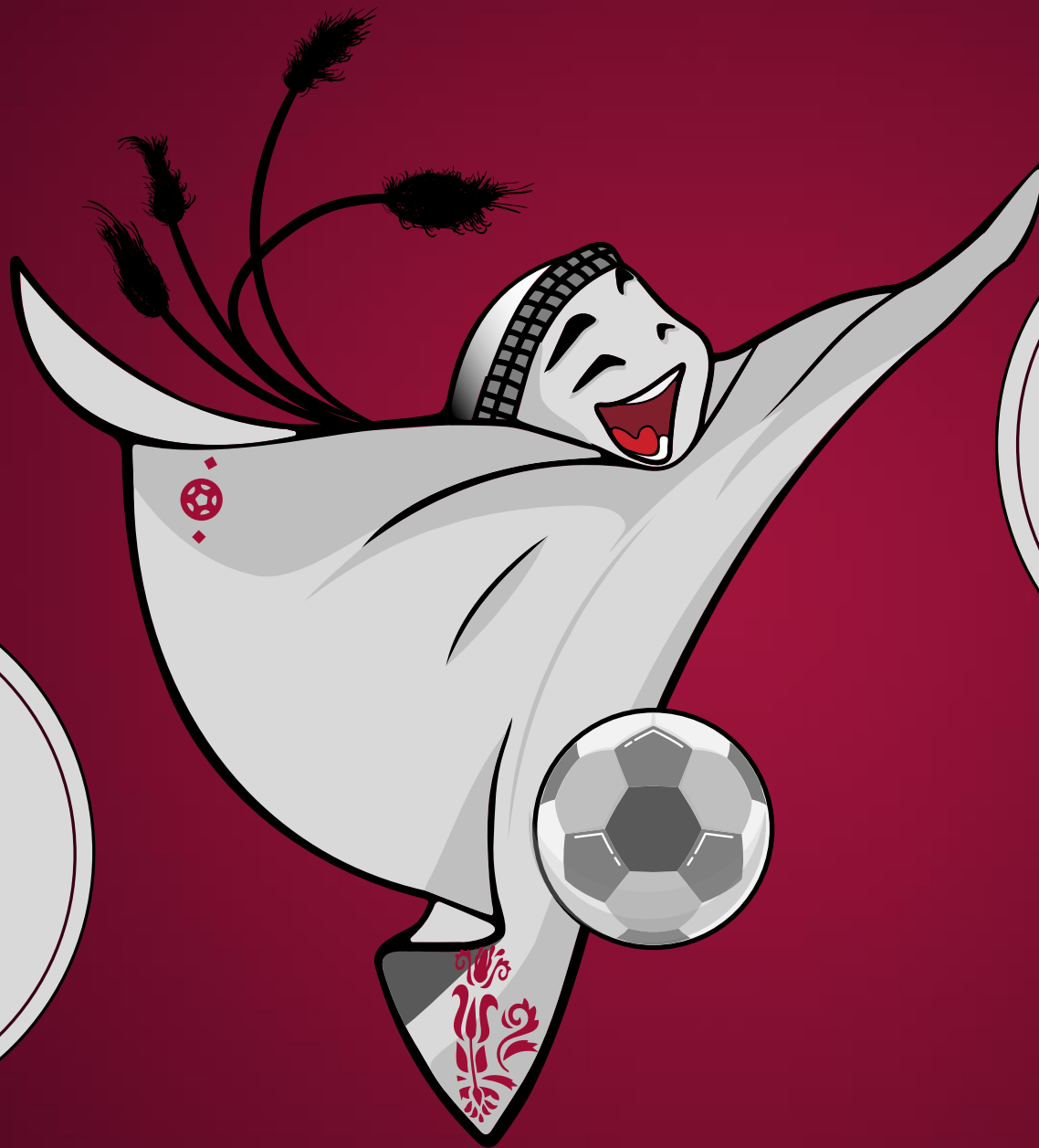
```sql
1    -- Retrieve match details from Group A, where the referee's name starts with "M", ordered by the match number
2 •  select distinct m.Number as match_number , tp.Team_name1 ,
3    tp.Team_name2 , t.Group_Name , r.Name as referee_name , o.Role
4    from ((team t join team_played tp on t.name=tp.Team_name1 or t.name=tp.Team_name2)
5    join ( `match` m join officiate o on m.Number = o.Match_Number) on tp.Match_Number = m.Number)
6     join referee r on o.Referee_Ssn=r.Ssn
7    where t.Group_Name='Group A' and r.Name like 'M%'
8    order by m.Number asc
9
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

match_number	Team_name1	Team_name2	Group_Name	referee_name	Role
1	Qatar	Ecuador	Group A	Michael Oliver	Fourth Official
24	Netherlands	Ecuador	Group A	Mahmoud Al Banna	Main Referee
24	Netherlands	Ecuador	Group A	Maguette Ndiaye	Fourth Official
24	Netherlands	Ecuador	Group A	Matthew Conger	VAR
49	Netherlands	USA	Group A	Michael Oliver	Fourth Official
52	England	Senegal	Group A	Mustapha Ghorbal	Assistant Referee 1
58	Argentina	Netherlands	Group A	Mustapha Ghorbal	Assistant Referee 1

Result 6 ×

FIFA WORLD CUP
Qatar2022