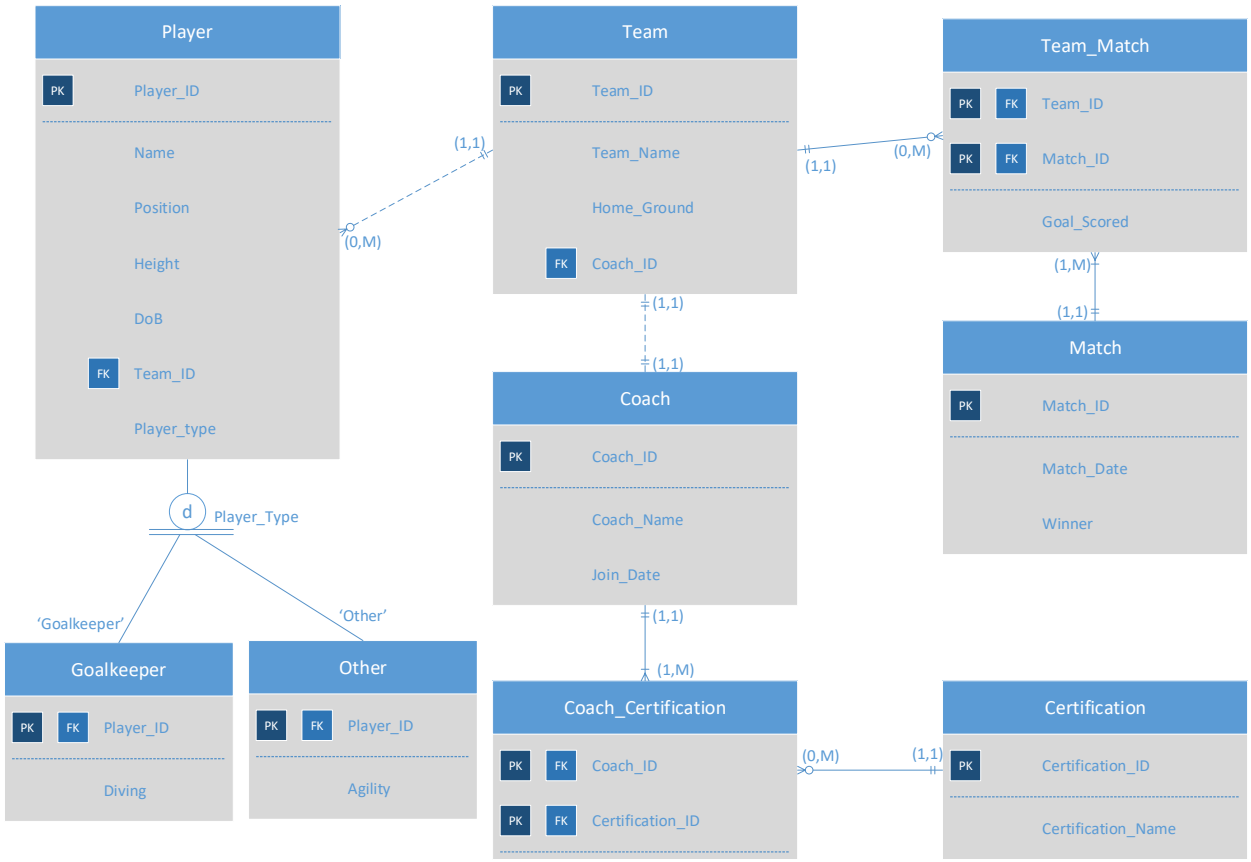
Project Report 5



1. .

```
--Jiyad ur Rehman
--1

Select Player_Name, Length(CONCAT('Mr. ', Player_Name)) "Lenght of Name with Mr", CONCAT(round(g.diving,-1),'%') "Diving Rounded Nearest 10th" FROM player p , goalkeeper g WHERE
p.player_ID = g.Player_ID;
```

Script Output | Query Result | SQL | All Rows Fetched: 4 in 0.421 seconds

	PLAYER_NAME	Lenght of Name with Mr	Diving Rounded Nearest 10th
1	Kahn	8	100%
2	Leno	8	90%
3	Howard	10	100%
4	Neuer	9	90%

The query extract Player_Name, length of Player_name with concatenation of Mr. in the start of the name and diving capability of every goalkeeper rounded off to tenth and concatenated with % sign at end.

2. .

```
--Jiyad ur Rehman
--2

Select p.Player_Name, FLOOR(MONTHS_BETWEEN(SYSDATE,p.DOB)/12) Age, TO_CHAR(DECODE(TEAM_NAME, 'ManU', 1,
                                                                                    'Barca', 3,
                                                                                    'ManC', 4,
                                                                                    'Aston', 2,
                                                                                    0)) "Team Rank"
FROM player p, team t WHERE
p.team_id=t.team_id;

--Jiyad ur Rehman
```

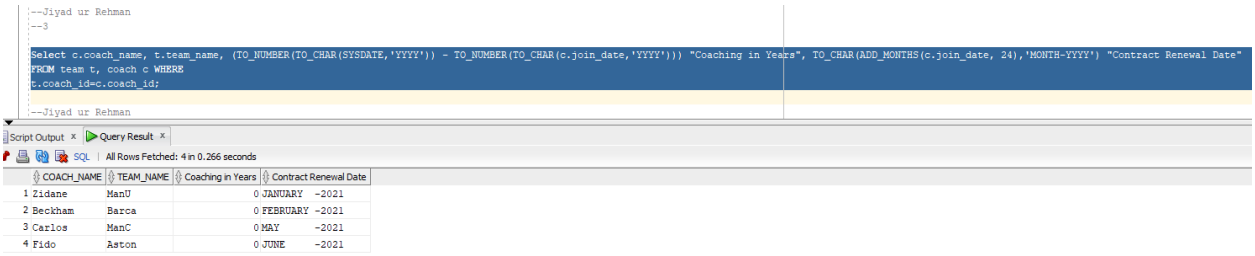
Script Output | Query Result

SQL | All Rows Fetched: 12 in 0.715 seconds

	PLAYER_NAME	AGE	Team Rank
1	Ronaldo	37	1
2	Messi	37	1
3	Neymar	35	1
4	Kahn	35	1
5	Pogba	37	3
6	Ronaldinho	35	3
7	Leno	31	3
8	Rooney	39	4
9	Howard	28	4
10	Bale	31	2
11	Salah	24	2
12	Neuer	24	2

The query shares player name, their age calculated from date of birth and the rank of their team for which they play.

3. .



The query shares the coach name, team name, time period in years since the coach is coaching this team calculated using join date and Contract renewal date of the coach which is due two years after the join date.

4. .

```
--Jiyad ur Rehman
--4

Select p.Player_Name, Replace(UPPER(p.Player_position), 'GK', 'Goal Keeper') "Postion", lower(SUBSTR(t.home_ground,0,3)) "Ground Abbreviation"
From Player p, Team t WHERE
p.team_id=t.team_id;

--Jiyad ur Rehman
```

Script Output | Query Result

SQL | All Rows Fetched: 12 in 0.349 seconds

	PLAYER_NAME	Postion	Ground Abbreviation
1	Ronaldo	CF	gre
2	Messi	LF	gre
3	Neymar	RM	gre
4	Kahn	Goal Keeper	gre
5	Pogba	LF	blu
6	Ronaldinho	LM	blu
7	Leno	Goal Keeper	blu
8	Rooney	LM	red
9	Howard	Goal Keeper	red
10	Bale	CF	whi
11	Salah	LM	whi
12	Neuer	Goal Keeper	whi

The query extracts player name, and the position which was initially converted into upper case and then GK was replaced with Goal Keeper. It also shared abbreviation of Home ground of the team of each player. The abbreviation just contains the first three letter of the ground name and they were converted to lower case.

5. .

```
--Jiyad ur Rehman
--5

SELECT Match_ID, Max(Goal_Scored) "Maximum Goal Scored in Each Match" FROM TEAM_MATCH
GROUP BY MATCH_ID;

--Jiyad ur Rehman
```

Script Output | Query...

SQL | All Rows Fetched: 2 in 0.631 seconds

	MATCH_ID	Maximum Goal Scored in Each Match
1	3000	2
2	3001	1

The query extracts the maximum goal scored in that match irrespective of the team. Means it finds the maximum goals in each match.

6. .

```
--Jiyad ur Rehman
--6

SELECT Match_ID, Max(Goal_Scored) "Maximum Goal Scored in Each Match" FROM TEAM_MATCH
WHERE match_id = 3001
GROUP BY MATCH_ID;

--Jiyad ur Rehman
```

Script Output | Query Result

SQL | All Rows Fetched: 1 in 0.026 seconds

	MATCH_ID	Maximum Goal Scored in Each Match
1	3001	1

The query extracts the maximum goal scored in the match 3001.

7. .

```
--Jiyad ur Rehman
--7

SELECT Match_ID, Max(Goal_Scored) "Maximum Goal Scored in Each Match" FROM TEAM_MATCH
WHERE match_id = 3001
GROUP BY MATCH_ID
HAVING Max(Goal_Scored) > 0;

--Jiyad ur Rehman
```

Script Output | Query Result

SQL | All Rows Fetched: 1 in 0.021 seconds

	MATCH_ID	Maximum Goal Scored in Each Match
1	3001	1

The query extracts the maximum goal scored in the match 3001 only if the goals scored is greater than 0.

8. .

```
--Jiyad ur Rehman
--8

Select t.Team_Name, c.Coach_Name, Round(Avg(p.Height)) "Average Team Height" FROM player p, team t, coach c
WHERE
p.team_id=t.team_id and
t.coach_id=c.coach_id
GROUP BY t.team_name, c.coach_Name
HAVING
Round(Avg(p.Height)) > 183;
```

Script Output | Query Result

SQL | All Rows Fetched: 3 in 0.162 seconds

	TEAM_NAME	COACH_NAME	Average Team Height
1	ManU	Zidane	184
2	Aston	Fido	185
3	ManC	Carlos	185

The query extracts the team name the coach of the team and the average height of the players in that team grouped by team name and coach name for all the teams where the average height is more than 183.

9. .

```
--Jiyad ur Rehman
--9

Select t.Team_Name, p.player_type, Round(Avg(p.Height)) "Average Height" FROM player p, team t
WHERE
p.team_id=t.team_id
GROUP BY ROLLUP  (t.team_name, p.player_type);

--Jiyad ur Rehman
```

Script Output | Query Result

SQL | All Rows Fetched: 13 in 0.081 seconds

	TEAM_NAME	PLAYER_TYPE	Average Height
1	ManC	Goalkeeper	183
2	ManC	Other	187
3	ManC	(null)	185
4	ManU	Goalkeeper	181
5	ManU	Other	185
6	ManU	(null)	184
7	Aston	Goalkeeper	183
8	Aston	Other	187
9	Aston	(null)	185
10	Barca	Goalkeeper	181
11	Barca	Other	184
12	Barca	(null)	183
13	(null)	(null)	184

The query extract Average height grouped by Team name and player type. As ROLLUP was used it makes combination of group of first column with other columns. So, for ROLLUP sequence is important. Following combination will be in the result:
Team_Name
Team_Name and Player_type
Overall

10. .

```
--Jiyad ur Rehman
--10

Select t.Team_Name, p.player_type, Round(Avg(p.Height)) "Average Height" FROM player p, team t
WHERE
p.team_id=t.team_id
GROUP BY CUBE  (t.team_name, p.player_type);
```

Script Output × Query Result ×

SQL | All Rows Fetched: 15 in 0.042 seconds

	TEAM_NAME	PLAYER_TYPE	Average Height
1	(null)	(null)	184
2	(null)	Goalkeeper	182
3	(null)	Other	185
4	ManC	(null)	185
5	ManC	Goalkeeper	183
6	ManC	Other	187
7	ManU	(null)	184
8	ManU	Goalkeeper	181
9	ManU	Other	185
10	Aston	(null)	185
11	Aston	Goalkeeper	183
12	Aston	Other	187
13	Barca	(null)	183
14	Barca	Goalkeeper	181
15	Barca	Other	184

The query extract Average height grouped by Team name and player type. As CUBE was used it makes combination of group of all columns. So, for CUBE sequence is not important. Following combination will be in the result:
Team_Name
Player_type
Team_Name and Player_type
Overall