SQLZoo

Unofficial answers to sqlzoo exercises found here: https://sqlzoo.net/wiki/The_JOIN_operation

game

id	mdate	stadium	team1	team2
1001	8 June 2012	National Stadium, Warsaw	POL	GRE
1002	8 June 2012	Stadion Miejski (Wroclaw)	RUS	CZE
1003	12 June 2012	Stadion Miejski (Wroclaw)	GRE	CZE
1004	12 June 2012	National Stadium, Warsaw	POL	RUS

goal

matchid	teamid	player	gtime
1001	POL	Robert Lewandowski	17
1001	GRE	Dimitris Salpingidis	51
1002	RUS	Alan Dzagoev	15
1002	RUS	Roman Pavlyuchenko	82

eteam

id	teamname	coach
POL	Poland	Franciszek Smuda
RUS	Russia	Dick Advocaat
CZE	Czech Republic	Michal Bilek
GRE	Greece	Fernando Santos

JOIN

1. Modify it to show the matchid and player name for all goals scored by Germany. To identify German players, check for: teamid = 'GER'.

```
SELECT matchid, player FROM goal
WHERE teamid = 'GER';
```

2. Show id, stadium, team1, team2 for just game 1012.

```
SELECT id, stadium, team1, team2 FROM game WHERE id = '1012';
```

3. Modify it to show the player, teamid, stadium and mdate for every German goal.

```
SELECT player, teamid, stadium, mdate FROM goal JOIN game ON(matchid = id)
WHERE teamid = 'GER';
```

4. Show the team1, team2 and player for every goal scored by a player called Mario.

```
SELECT team1, team2, player FROM goal JOIN game ON(matchid = id)
WHERE player LIKE 'Mario %';
```

5. Show player, teamid, coach, gtime for all goals scored in the first 10 minutes gtime<=10.

```
SELECT player, teamid, coach, gtime FROM goal JOIN eteam ON(teamid = id)
WHERE gtime <= 10;</pre>
```

6. List the the dates of the matches and the name of the team in which 'Fernando Santos' was the team1 coach.

```
SELECT mdate, teamname FROM game JOIN eteam ON (team1=eteam.id)
WHERE coach = 'Fernando Santos';
```

7. List the player for every goal scored in a game where the stadium was 'National Stadium, Warsaw'

```
SELECT player FROM goal JOIN game ON(matchid = id)
WHERE stadium = 'National Stadium, Warsaw';
```

8. Show the name of all players who scored a goal against Germany.

```
SELECT DISTINCT goal.player FROM goal JOIN game ON(id=matchid) WHERE (team1 = 'GER' OR team2 = 'GER') AND teamid != 'GER';
```

9. Show teamname and the total number of goals scored.

```
SELECT teamname, COUNT(player) FROM eteam JOIN goal ON(id=teamid) GROUP BY teamname;
```

10. Show the stadium and the number of goals scored in each stadium.

```
SELECT stadium, COUNT(player) FROM game JOIN goal ON(id=matchid) GROUP BY stadium;
```

11. For every match involving 'POL', show the matchid, date and the number of goals scored.

```
SELECT matchid, mdate, team1, team2, teamid FROM game JOIN goal ON matchid = id WHERE (team1 = 'POL' OR team2 = 'POL';
```

12. For every match where 'GER' scored, show matchid, match date and the number of goals scored by 'GER'.

```
SELECT matchid, mdate, COUNT(player) FROM goal JOIN game ON(matchid=id)
WHERE teamid = 'GER'
GROUP BY matchid, mdate;
```

13. List every match with the goals scored by each team as shown. This will use "CASE WHEN" which has not been explained in any previous exercises.

```
SELECT game.mdate, game.team1, SUM(CASE WHEN goal.teamid = game.team1 THEN 1 ELSE 0 END) AS score1, game.team2, SUM(CASE WHEN goal.teamid = game.team2 THEN 1 ELSE 0 END) AS score2 FROM game LEFT JOIN goal ON (game.id = goal.matchid) GROUP BY game.mdate, game.team1, game.team2

ORDER BY game.mdate, goal.matchid, game.team1, game.team2
```