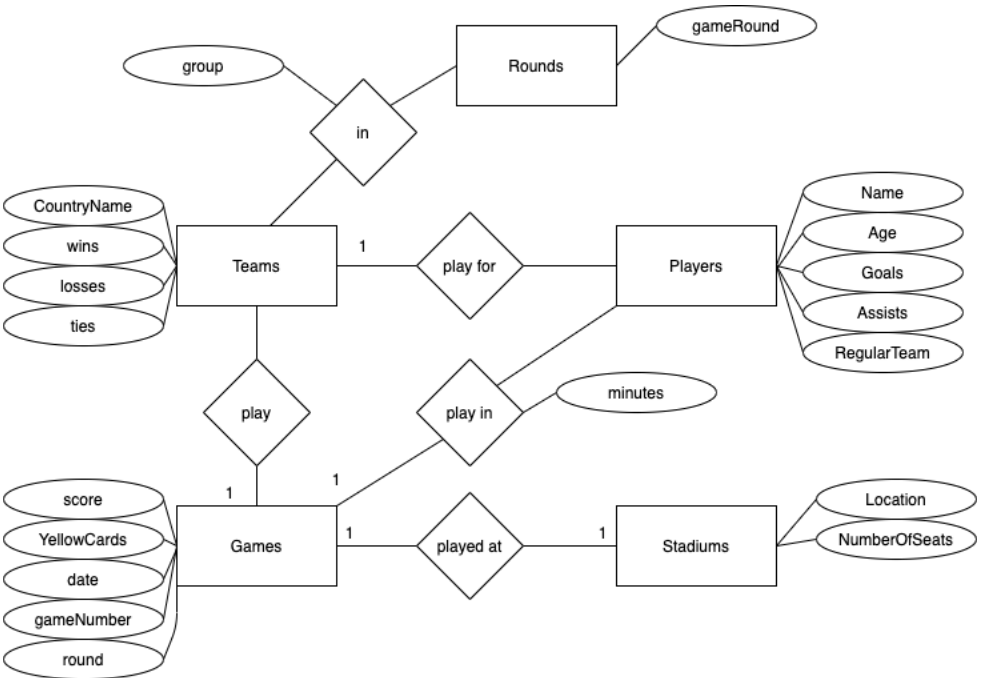
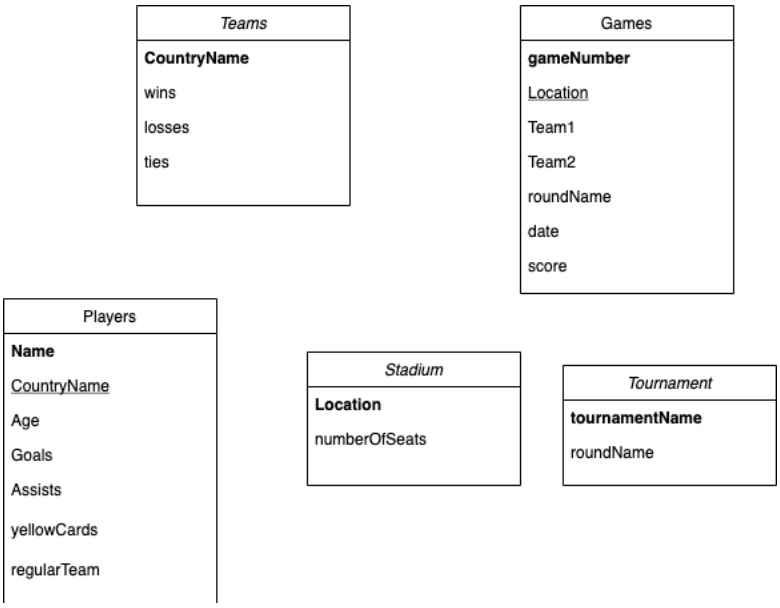
ER Model



Relational model



SQL commands

```
drop database if exists Euros ;
create database Euros ;

show databases ;

use Euros ;

Drop table if exists Teams;
Drop table if exists Games;
Drop table if exists Players;
Drop table if exists Stadium;
Drop table if exists Tournament;

Create table Teams (
        countryName varchar(30) NOT NULL,
        wins int,
        losses int,
        ties int,
        Primary Key (countryName));

Create table Games (
        gameNumber int,
        Location varchar(20),
        team1 varchar(30),
        team2 varchar(30),
        roundName varchar(20),
        gdate date,
        team1score int,
        team2score int,
        Primary Key (gameNumber),
        FOREIGN KEY (team1) REFERENCES Teams(countryName),
        FOREIGN KEY (team2) REFERENCES Teams(countryName),
        FOREIGN KEY (Location) REFERENCES Stadiums(location));


Create table Players (
        name varchar(30) NOT NULL,
        countryName varchar(30) NOT NULL,
        age int,
        goals int,
        assists int,
        yellowCards int,
```

```
        regularTeam varchar(30),
        PRIMARY KEY (name),
        FOREIGN KEY (countryName) REFERENCES Teams(countryName) ) ;

Create table Stadiums (
        location varchar(30) NOT NULL,
        numberrOfSeats int,
        Primary Key (location));


insert into Teams values ("Turkey", 0, 0, 0);
insert into Teams values ("Italy", 0,0,0);
insert into Teams values ("Wales", 0, 0, 0);
insert into Teams values ("Switzerland", 0,0,0);
```

Describe results

```
mysql> describe teams
    -> ;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| countryName | varchar(30) | NO   | PRI | NULL    |       |
| wins        | int         | YES  |     | NULL    |       |
| losses      | int         | YES  |     | NULL    |       |
| ties        | int         | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
4 rows in set (0.02 sec)

mysql> describe Games;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| gameNumber | int         | NO   | PRI | NULL    |       |
| Location   | varchar(20) | YES  | MUL | NULL    |       |
| team1      | varchar(30) | YES  | MUL | NULL    |       |
| team2      | varchar(30) | YES  | MUL | NULL    |       |
| roundName  | varchar(20) | YES  |     | NULL    |       |
| gdate      | date        | YES  |     | NULL    |       |
| team1score | int         | YES  |     | NULL    |       |
| team2score | int         | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
8 rows in set (0.00 sec)

mysql> describe players;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| name        | varchar(30) | NO   | PRI | NULL    |       |
| countryName | varchar(30) | NO   | MUL | NULL    |       |
| age         | int         | YES  |     | NULL    |       |
| goals       | int         | YES  |     | NULL    |       |
| assists     | int         | YES  |     | NULL    |       |
| yellowCards | int         | YES  |     | NULL    |       |
| regularTeam | varchar(30) | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
7 rows in set (0.01 sec)
```

```
mysql> describe stadiums;
+---------------+-------------+------+-----+---------+-------+
| Field         | Type        | Null | Key | Default | Extra |
+---------------+-------------+------+-----+---------+-------+
| location      | varchar(30) | NO   | PRI | NULL    |       |
| numberrOfSeats | int         | YES  |     | NULL    |       |
+---------------+-------------+------+-----+---------+-------+
2 rows in set (0.00 sec)
```

Select statement

```
mysql> select * from Teams;
+-------------+------+--------+------+
| countryName | wins | losses | ties |
+-------------+------+--------+------+
| Italy       |    0 |      0 |    0 |
| Switzerland |    0 |      0 |    0 |
| Turkey      |    0 |      0 |    0 |
| Wales       |    0 |      0 |    0 |
+-------------+------+--------+------+
4 rows in set (0.01 sec)
```