Assignment Specification -V1

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Introduction

in this report for database the scenario I choose is Scenario A: the FIFA womens world cup. So year I choose is 2023 FIFA world cup that 32 teams and 500 players and 64 matches include in this database. The purpose of this database is according to the scenario is for provide manageable and real information that related to 2023 fiaf womens world cup.

For this scenario I have implemented four mysql script and three python files. Mysql scripts are Tables.sql, Values.sql, Commands.sql, Commands1.sql. in Tables.sql included implementation of all tables. In Values.sql file included implementation of data for that tables. In Commands.sql file included all mysql queries that have implemented. In Commands1.sql file included all advance features the have implemented. So in python files used for connect to mysql server and run through terminal.

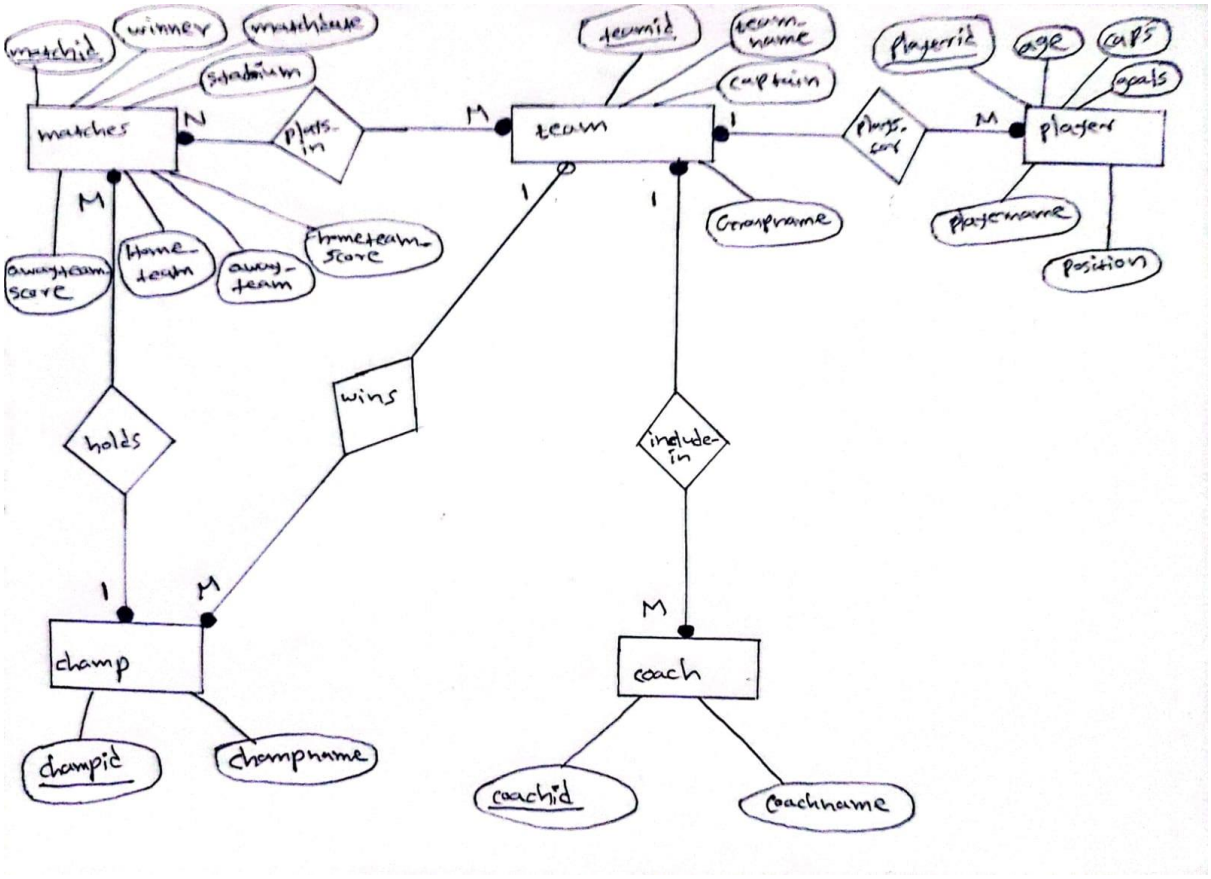
Python files names are FIFA1.py, FIFA2.py and main.py. in FIFA1.py can run define queries that already made. In FIFA2.py can user input data that need.

Entity Sets	Keys	Other Attributes
coach	Coachid (PK)	coachname
team	teamid(PK)	teamname,Groupname, captain
player	Playerid(PK)	playername,position,age,caps,goal
Matches	matchid(PK)	hometeam,awayteam,hometeam_score,awayteam_score winner,matchdate, stadium
champ	champid(PK)	champname

Relationships set	Participation between sets sets	Attributes of relationship set
Playes in	team,matches	……
Plays for	player,team	……
Include in	coach,team	……
wins	team,champ	……
holds	matches,champ	……

Relationships set	Cardinalty Constraints	Participation Constraints
Playes in	Many – Many (Matche played by two teams, Teams play more matches.)	Team –Total, matches – Total (match should play by teams, team should play match)
Plays for	One – Many (Team can have many players. Players can have one team)	Player –Total, team –Total (player should be team and team need atleast one player)
Include in	One – Many (team can have many coach but coach can include in one team.)	Team –Total, coach –Total (team need one coach and coach should be in one team)
wins	One – Many (team can have many championships championship can have one team)	Team – patial, champ – partial (team may not win champ, champ may not have team)
holds	One – Many (championship has more macthes, matches can have one championship.)	champ – Total, matches – Total (match should hold champ, championship need matches)

ER Diagram



Step 1: Mapping entities

coach(<u>coachid</u>, coachname)

team(<u>teamid</u>, teamname, Groupname, captain)

player(<u>playerid</u>, playername, position, age, caps, goals)

matches (<u>matchid</u>,hometeam, awayteam, hometeam_score, awayteam_score, winner, matchdate,stadium)

champ(<u>champid</u>, champname)

Step 2: Mapping 1: N relationships

Coach(<u>coachid</u>, coachname)

team(<u>teamid</u>, teamname, Groupname, captain<u>, coachid</u>)

FK coachid REF coach(coachid)

player(playerid, playername, position, teamid , age, caps, goals)

FK teamid REF team(teamid)

matches (matchid,hometeam, awayteam, hometeam_score, awayteam_score, Winner, teamid,matchdate,stadium)

FK teamid REF team(teamid)

champ(champid, champname, macthid, teamid)
FK matchid REF matches(matchid)

FK teamid REF team(teamid)

Step 3: Each M:N relationship type become a separate relation.

matches (matchid,hometeam, awayteam, hometeam_score, awayteam_score, Winner, matchdate, stadium)

team(teamid, teamname, Groupname, captain, coachid)

playsin (teamid,matchesid)

FK teamid REF team(teamid)

FK matchid REF matches(matchid)

Coach table

Name	Data type	null	Attribute description
coachid	char	no	Coach id, unique
coachname	varchar	no	Name of coaches

team table

Name	Data type	null	Attribute description
teamid	Char		Team id, unique
teamname	Varchar	No	Name of team
Groupname	Varchar	no	Name of group
coachid	char		Coavh id, unique
captain	varchar	no	Captain of the team

Player table

Name	Data type	null	Attribute description
Playerid	char	No	Player id, unique
playerName	varchar	No	Name of player
Position	Varchar	no	Position of player
teamid	Char		Team id, unique
age	Int		Age of player
caps	Int		Number of matches that player played
goals	int		Number of goals that player scored

matches table

Name	Data type	null	Attribute description
matchid	Char	No	Match id, unique
hometeam	Varchar	No	Home team
awayteam	Varchar	no	Away team
hometeam_score	Int		Score of home team
awayteam_score	Int		Score of away team
winner	Varchar		Winner team
teamid	Char		Winner team ID
matchdate	Date		Match date
stadium	varchar		Stadium that match held

champ table

Name	Data type	null	Attribute description
champid	Char		Championship id
Champ_name	Varchar		Championship name

matchid	Char	no	Match ID
teamid	Char		Team ID

in this database I used five entaties as main points. The names of entaties are coach, table, player, matches and champ (championships). Also I used five relationship for connect this entaties.

In coach table two attributes and two datatypes included. In team table five tables and two data types include. In player table seven attributes and three data types included. In matches table nine attributes and four data types included. In champ table four attributes and two data types included.

Below step by step discussion about tables. For implement all this tables I used Tables.sql script.

Coach table

In coach table used coachid and coachname as attributes. In this table included all information about coaches in FIFA women world cup 2023. Coachid is primary key and no foreign keys.

Implementation:

```
CREATE TABLE coach (
    coachid CHAR(5) NOT NULL,
    coachname VARCHAR(36) NOT NULL,
    PRIMARY KEY (coachid)

);
```

Output:

```
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| coachid   | char(5)     | NO   | PRI | NULL    |       |
| coachname | varchar(36) | NO   |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
```

Team table

In team table used teamid,teamname,Groupname,coached,captain as attributes. In this table included all information about teams in FIFA women world cup 2023. teamid is primary key and coachid as foreign key.

Implementation:

```sql
CREATE TABLE team (
    teamid CHAR(6),
    teamname VARCHAR(36) NOT NULL,
    Groupname VARCHAR(10) NOT NULL,
    Coachid CHAR(3),
    captain VARCHAR(36) NOT NULL,
    PRIMARY KEY (teamid),
    FOREIGN KEY (Coachid) REFERENCES coach (coachid)
);
```

Output:

```
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| teamid    | char(6)     | NO   | PRI | NULL    |       |
| teamname  | varchar(36) | NO   |     | NULL    |       |
| Groupname | varchar(10) | NO   |     | NULL    |       |
| Coachid   | char(3)     | YES  | MUL | NULL    |       |
| captain   | varchar(36) | NO   |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
```

Player table

In player table used playerid,playername,position,teamid,age,caps,goals as attributes. In this table included all information about players in FIFA women world cup 2023. playerid is primary key and teamid as foreign key.

Implementation:

```sql
CREATE TABLE player (
    Playerid CHAR(9) NOT NULL,
    playerName VARCHAR(36) NOT NULL,
    Position VARCHAR(10) NOT NULL,
    teamid CHAR(4),
    age int,
    caps int,
    goals int,
    PRIMARY KEY (playerid),
    FOREIGN KEY (teamid) REFERENCES team (teamid)
);
```

Output:

```
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| Playerid   | char(9)     | NO   | PRI | NULL    |       |
| playerName | varchar(36) | NO   |     | NULL    |       |
| Position   | varchar(10) | NO   |     | NULL    |       |
| teamid     | char(4)     | YES  | MUL | NULL    |       |
| age        | int         | YES  |     | NULL    |       |
| caps       | int         | YES  |     | NULL    |       |
| goals      | int         | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
```

Matches table

In matches table used matched, hometeam, awayteam, homeream_score, awayteam_score, winner, teamid, matchdate, stadium as attributes. In this table included all information about matches in FIFA women world cup 2023. matchid is primary key and teamid as foreign key.

Implementation:

```
CREATE TABLE matches (
    matchid CHAR(6) not null,
    hometeam VARCHAR(36) not null ,
    awayteam VARCHAR(36) not null,
    hometeam_score INT,
    awayteam_score Int,
    winner VARCHAR(36),
    teamid CHAR(4),
    matchdate DATE,
    stadium VARCHAR(24),
    PRIMARY KEY (matchid),
    FOREIGN KEY (teamid) REFERENCES team (teamid)
);
```

Output:

```
+----------------+-------------+------+-----+---------+-------+
| Field          | Type        | Null | Key | Default | Extra |
+----------------+-------------+------+-----+---------+-------+
| matchid        | char(6)     | NO   | PRI | NULL    |       |
| hometeam       | varchar(36) | NO   |     | NULL    |       |
| awayteam       | varchar(36) | NO   |     | NULL    |       |
| hometeam_score | int         | YES  |     | NULL    |       |
| awayteam_score | int         | YES  |     | NULL    |       |
| winner         | varchar(36) | YES  |     | NULL    |       |
| teamid         | char(4)     | YES  | MUL | NULL    |       |
| matchdate      | date        | YES  |     | NULL    |       |
| stadium        | varchar(24) | YES  |     | NULL    |       |
+----------------+-------------+------+-----+---------+-------+
```

Champ table

This table is use for include information about championships in each match. It has champed, champ_name, matched, teamid as attributes. Champid as primary key and matched, teamid as foreign keys.

Implementation:

```
CREATE TABLE champ (
    champid CHAR(6),
    champ_name VARCHAR(30),
    matchid CHAR(6) NOT NULL,
    teamid CHAR(4),
    PRIMARY KEY (champid),
    FOREIGN KEY (matchid) REFERENCES matches (matchid),
    FOREIGN KEY (teamid) REFERENCES team (teamid)
);
```

Output:

```
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| champid    | char(6)     | NO   | PRI | NULL    |       |
| champ_name | varchar(30) | YES  |     | NULL    |       |
| matchid    | char(6)     | NO   | MUL | NULL    |       |
| teamid     | char(4)     | YES  | MUL | NULL    |       |
+------------+-------------+------+-----+---------+-------+
```

Sample data

I used Values.sql script for input sample data for tables in Tables.sql script. As a source used Wikipedia.org. below going through table by table

Sample data for coach

For sample data in coach table data include in for coach id and coach name. and used ‘INSERT INTO’ command for input data.

Implementation:

```
INSERT INTO coach VALUES('C01','Pitka Klimkova');
INSERT INTO coach VALUES('C02','Hege Riise');
INSERT INTO coach VALUES('c03','Alen StaPcic');
INSERT INTO coach VALUES('C04','Inka Grings');
INSERT INTO coach VALUES('C05','Tony Gustavsson');
INSERT INTO coach VALUES('C06','Bev Priestman');
INSERT INTO coach VALUES('C07','Randy Waldrum');
INSERT INTO coach VALUES('C08','Vera Pauw');
INSERT INTO coach VALUES('C09','Amelia Valverde');
INSERT INTO coach VALUES('C10','Futoshi Ikeda');
INSERT INTO coach VALUES('C11','Porge Vilda');
INSERT INTO coach VALUES('C12','Bruce Mwape');
INSERT INTO coach VALUES('C13','Shui Tingxia');
INSERT INTO coach VALUES('C14','Lars Sondergaard');
INSERT INTO coach VALUES('C15','Sarina Wiegman');
INSERT INTO coach VALUES('C16','Nicolas Delepine');
INSERT INTO coach VALUES('C17','Andries Ponker');
INSERT INTO coach VALUES('C18','Francisco Neto');
INSERT INTO coach VALUES('C19','Vlatko Andonovski');
INSERT INTO coach VALUES('C20','Mai duc Chung');
INSERT INTO coach VALUES('C21','Pia Sundhage');
INSERT INTO coach VALUES('C22','Herve Renard');
INSERT INTO coach VALUES('C23','Lorne Donaldson');
INSERT INTO coach VALUES('C24','Ignacio Tuintana');
INSERT INTO coach VALUES('C25','German Portanova');
INSERT INTO coach VALUES('C26','Milena Bertolini');
INSERT INTO coach VALUES('C27','Desiree Ellis');
INSERT INTO coach VALUES('C28','Peter Gerhardsson');
INSERT INTO coach VALUES('C29','Nelson Abadia');
INSERT INTO coach VALUES('C30','Martina Voss-Tecklenburg');
INSERT INTO coach VALUES('C31','Colin Bell');
INSERT INTO coach VALUES('C32','Reynald Pedros');
```

Output:

coachid	coachname
C01	Pitka Klimkova
C02	Hege Riise
c03	Alen StaPcic
C04	Inka Grings
C05	Tony Gustavsson
C06	Bev Priestman
C07	Randy Waldrum
C08	Vera Pauw
C09	Amelia Valverde
C10	Futoshi Ikeda
C11	Porge Vilda
C12	Bruce Mwape
C13	Shui Tingxia
C14	Lars Sondergaard
C15	Sarina Wiegman
C16	Nicolas Delepine
C17	Andries Ponker
C18	Francisco Neto
C19	Vlatko Andonovski
C20	Mai duc Chung
C21	Pia Sundhage
C22	Herve Renard
C23	Lorne Donaldson
C24	Ignacio Tuintana
C25	German Portanova
C26	Milena Bertolini
C27	Desiree Ellis
C28	Peter Gerhardsson
C29	Nelson Abadia
C30	Martina Voss-Tecklenburg
C31	Colin Bell
C32	Reynald Pedros

Sample data fro team

For sample data in team table data include in for teamid, teamname, Groupname, coachid, captain. and used ‘INSERT INTO’ command for input data.

Implementation:

```
INSERT INTO team VALUES('T01','New zealand','A','C01','Ali Riley');
INSERT INTO team VALUES('T02','Norway','A','C02','Tuva Hansen');
INSERT INTO team VALUES('T03','Philippines','A','C03','Tahnai Annis');
INSERT INTO team VALUES('T04','Switzerland','A','C04','Lia Wälti');
INSERT INTO team VALUES('T05','Australia','B','C05','Sam Kerr');
INSERT INTO team VALUES('T06','Canada','B','C06','Christine Sinclair');
INSERT INTO team VALUES('T07','Nigeria','B','C07','Onome Ebi');
INSERT INTO team VALUES('T08','Republic of Ireland','B','C08','Katie McCabe');
INSERT INTO team VALUES('T09','Costa Rica','C','C09','Mariela Campos');
INSERT INTO team VALUES('T10','Japan','C','C10','Saki Kumagai');
INSERT INTO team VALUES('T11','Spain','C','C11','Ivana Andrés');
INSERT INTO team VALUES('T12','Zambia','C','C12','Barbra Banda');
INSERT INTO team VALUES('T13','China','D','C13','Wang Shanshan');
INSERT INTO team VALUES('T14','Denmark','D','C14','Pernille Harder');
INSERT INTO team VALUES('T15','England','D','C15','Millie Bright');
INSERT INTO team VALUES('T16','Haiti','D','C16','Nérilia Mondésir');
INSERT INTO team VALUES('T17','Netherland','E','C17','Sherida Spitse');
INSERT INTO team VALUES('T18','Portugal','E','C18','Ana Borges');
INSERT INTO team VALUES('T19','United States','E','C19','Lindsey Horan');
INSERT INTO team VALUES('T20','Vietnam','E','C20','Huynh Nhu');
INSERT INTO team VALUES('T21','Brazil','F','C21','Tamires');
INSERT INTO team VALUES('T22','France','F','C22','Wendie Renard');
INSERT INTO team VALUES('T23','Jamaica','F','C23','Khadija Shaw');
INSERT INTO team VALUES('T24','Panama','F','C24','Wendy Natis');
INSERT INTO team VALUES('T25','Argentina','G','C25','Julieta Cruz');
INSERT INTO team VALUES('T26','Italy','G','C26','Cristiana Girelli');
INSERT INTO team VALUES('T27','South Africa','G','C27','Noko Matlou');
INSERT INTO team VALUES('T28','Sweden','G','C28','Caroline Seger');
INSERT INTO team VALUES('T29','Colombia','H','C29','Daniela Montoya');
INSERT INTO team VALUES('T30','Germany','H','C30','Alexandra Popp');
INSERT INTO team VALUES('T31','South Korea','H','C31','Kim Hye-ri');
INSERT INTO team VALUES('T32','Morocco','H','C32','Ghizlane Chebbak');
```

Output:

teamid	teamname	Groupname	Coachid	captain
T01	New zealand	A	C01	Ali Riley
T02	Norway	A	C02	Tuva Hansen
T03	Philippines	A	C03	Tahnai Annis
T04	Switzerland	A	C04	Lia Wälti
T05	Australia	B	C05	Sam Kerr
T06	Canada	B	C06	Christine Sinclair
T07	Nigeria	B	C07	Onome Ebi
T08	Republic of Ireland	B	C08	Katie McCabe
T09	Costa Rica	C	C09	Mariela Campos
T10	Japan	C	C10	Saki Kumagai
T11	Spain	C	C11	Ivana Andrés
T12	Zambia	C	C12	Barbra Banda
T13	China	D	C13	Wang Shanshan
T14	Denmark	D	C14	Pernille Harder
T15	England	D	C15	Millie Bright
T16	Haiti	D	C16	Nérilia Mondésir
T17	Netherland	E	C17	Sherida Spitse
T18	Portugal	E	C18	Ana Borges
T19	United States	E	C19	Lindsey Horan
T20	Vietnam	E	C20	Huynh Nhu
T21	Brazil	F	C21	Tamires
T22	France	F	C22	Wendie Renard
T23	Jamaica	F	C23	Khadija Shaw
T24	Panama	F	C24	Wendy Natis
T25	Argentina	G	C25	Julieta Cruz
T26	Italy	G	C26	Cristiana Girelli
T27	South Africa	G	C27	Noko Matlou
T28	Sweden	G	C28	Caroline Seger
T29	Colombia	H	C29	Daniela Montoya
T30	Germany	H	C30	Alexandra Popp
T31	South Korea	H	C31	Kim Hye-ri
T32	Morocco	H	C32	Ghizlane Chebbak

Sample data for player

For sample data in player table data include in for playerid, playername, position, teamid, age, caps, goals. and used ‘INSERT INTO’ command for input data.

Implementation:

```
INSERT INTO player VALUES('P01','Erin Nayler','GK','T01',31,45,0);
INSERT INTO player VALUES('P02','Ria Percival','MF','T01',33,23,15);
INSERT INTO player VALUES('P03','Claudia Bunge','DF','T01',23,56,0);
INSERT INTO player VALUES('P04',' CJ Bott','DF','T01',28,65,3);
INSERT INTO player VALUES('P05','Michaela Foster','DF','T01',24,63,0);
INSERT INTO player VALUES('P06','Malia Steinmetz','MF','T01',24,54,0);
INSERT INTO player VALUES('P07','Ali Riley','DF','T01',35,23,0);
INSERT INTO player VALUES('P08','Daisy Cleverley','MF','T01',26,43,3);
INSERT INTO player VALUES('P09','Gabi Rennie','MF','T01',22,21,2);
INSERT INTO player VALUES('P10','Annalie Longo','MF','T01',24,43,3);
INSERT INTO player VALUES('P11','Olivia Chance','MF','T01',24,67,0);
INSERT INTO player VALUES('P12','Betsy Hassett','MF','T01',30,44,1);
INSERT INTO player VALUES('P13','Rebekah Stott','DF','T01',34,33,2);
INSERT INTO player VALUES('P14','Katie Bowen','DF','T01',23,34,1);
INSERT INTO player VALUES('P15','Paige Satchell','FW','T01',22,84,1);
INSERT INTO player VALUES('P16',' Cecilie Fiskerstrand','GK','T02',34,56,0);
INSERT INTO player VALUES('P17','Anja Sonstevold','DF','T02',25,43,3);
INSERT INTO player VALUES('P18','Sara Horte','DF','T02',24,56,2);
INSERT INTO player VALUES('P19','Tuva Hansen','DF','T02',27,54,0);
INSERT INTO player VALUES('P20','Guro Bergsvand','DF','T02',28,230);
INSERT INTO player VALUES('P21','Maren Mjeldn','DF','T02',29,21,0);
INSERT INTO player VALUES('P22','Ingrid Syrstad Engen','MF','T02',31,34,2);
INSERT INTO player VALUES('P23',' Vilde Boe Risa','MF','T02',32,45,2);
INSERT INTO player VALUES('P24','Karina Savik','FW','T02',31,54,1);
INSERT INTO player VALUES('P25','Caroline Graham Hansen','MF','T02',21,34,2);
INSERT INTO player VALUES('P26','Guro Reiten','GK','T02',22,65,0);
INSERT INTO player VALUES('P27','Guro Pettersen','MF','T02',23,23,2);
INSERT INTO player VALUES('P28','Thea Bjelde','FW','T02',21,12,0);
INSERT INTO player VALUES('P29','Ada Hegerberg','MF','T02',24,45,3);
INSERT INTO player VALUES('P30','Amalie Eikeland','MF','T02',25,12,1);
INSERT INTO player VALUES('P31','Olivia McDaniel','GK','T03',29,2,0);
INSERT INTO player VALUES('P32','Malea Cesar','DF','T03',21,7,1);
INSERT INTO player VALUES('P33','Jessika Cowart','DF','T03',24,6,0);
INSERT INTO player VALUES('P34','Jaclyn Sawicki','MF','T03',25,13,1);
INSERT INTO player VALUES('P35','Hali Long','DF','T03',25,15,1);
```

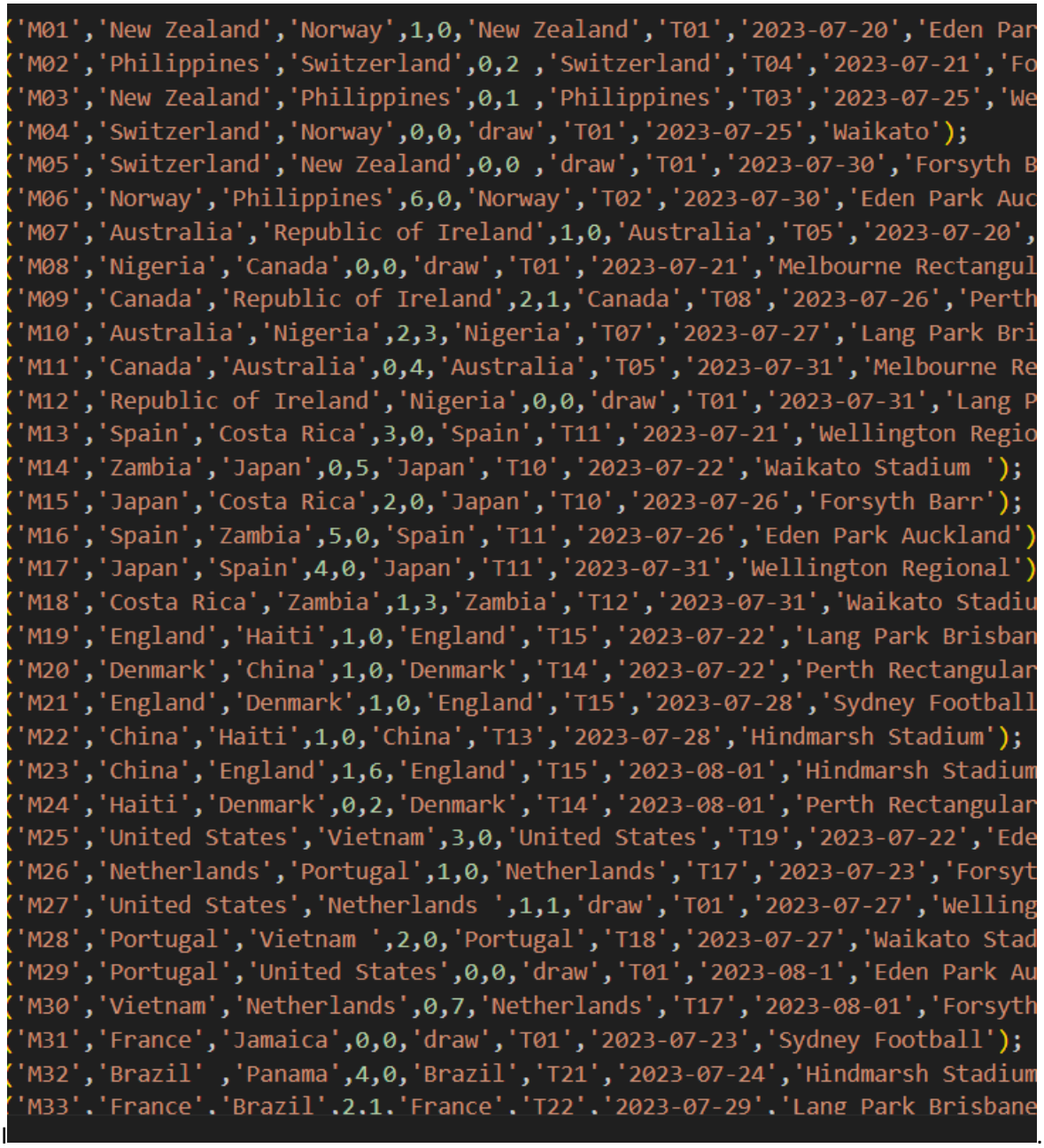
Output:

Playerid	playerName	Position	teamid	age	caps	goals
P01	Erin Nayler	GK	T01	31	45	0
P02	Ria Percival	MF	T01	33	23	15
P03	Claudia Bunge	DF	T01	23	56	0
P04	CJ Bott	DF	T01	28	65	3
P05	Michaela Foster	DF	T01	24	63	0
P06	Malia Steinmetz	MF	T01	24	54	0
P07	Ali Riley	DF	T01	35	23	0
P08	Daisy Cleverley	MF	T01	26	43	3
P09	Gabi Rennie	MF	T01	22	21	2
P10	Annalie Longo	MF	T01	24	43	3
P100	Christy Ucheibe	MF	T07	22	24	2
P101	Gift Monday	FW	T07	23	65	1
P102	Uchenna Kanu	FW	T07	24	82	1
P103	Deborah Abiodun	MF	T07	32	34	0
P104	Oluwatosin Demehin	DF	T07	21	83	2
P105	Rasheedat Ajibade	MF	T07	22	34	1
P106	Courtney Brosnan	GK	T08	23	94	2
P107	Claire Riordan	DF	T08	24	98	3
P108	Chloe Mustaki	DF	T08	25	53	0
P109	Louise Quinn	DF	T08	21	14	1
P11	Olivia Chance	MF	T01	24	67	0
P110	Niamh Fahey	DF	T08	22	22	1

Sample data for matches

For sample data in team table data include in for matchid, hometeam, awayteam, hometeam_score, awayteam_score, winner, teamid, matchid, stadium. and used ‘INSERT INTO’ command for input data.

Implementation:



```
('M01','New Zealand','Norway',1,0,'New Zealand','T01','2023-07-20','Eden Par
('M02','Philippines','Switzerland',0,2 ,'Switzerland','T04','2023-07-21','Fo
('M03','New Zealand','Philippines',0,1 ,'Philippines','T03','2023-07-25','We
('M04','Switzerland','Norway',0,0,'draw','T01','2023-07-25','Waikato');
('M05','Switzerland','New Zealand',0,0 ,'draw','T01','2023-07-30','Forsyth B
('M06','Norway','Philippines',6,0,'Norway','T02','2023-07-30','Eden Park Auc
('M07','Australia','Republic of Ireland',1,0,'Australia','T05','2023-07-20',
('M08','Nigeria','Canada',0,0,'draw','T01','2023-07-21','Melbourne Rectangul
('M09','Canada','Republic of Ireland',2,1,'Canada','T08','2023-07-26','Perth
('M10','Australia','Nigeria',2,3,'Nigeria','T07','2023-07-27','Lang Park Bri
('M11','Canada','Australia',0,4,'Australia','T05','2023-07-31','Melbourne Re
('M12','Republic of Ireland','Nigeria',0,0,'draw','T01','2023-07-31','Lang P
('M13','Spain','Costa Rica',3,0,'Spain','T11','2023-07-21','Wellington Regio
('M14','Zambia','Japan',0,5,'Japan','T10','2023-07-22','Waikato Stadium ');
('M15','Japan','Costa Rica',2,0,'Japan','T10','2023-07-26','Forsyth Barr');
('M16','Spain','Zambia',5,0,'Spain','T11','2023-07-26','Eden Park Auckland')
('M17','Japan','Spain',4,0,'Japan','T11','2023-07-31','Wellington Regional')
('M18','Costa Rica','Zambia',1,3,'Zambia','T12','2023-07-31','Waikato Stadiu
('M19','England','Haiti',1,0,'England','T15','2023-07-22','Lang Park Brisban
('M20','Denmark','China',1,0,'Denmark','T14','2023-07-22','Perth Rectangular
('M21','England','Denmark',1,0,'England','T15','2023-07-28','Sydney Football
('M22','China','Haiti',1,0,'China','T13','2023-07-28','Hindmarsh Stadium');
('M23','China','England',1,6,'England','T15','2023-08-01','Hindmarsh Stadium
('M24','Haiti','Denmark',0,2,'Denmark','T14','2023-08-01','Perth Rectangular
('M25','United States','Vietnam',3,0,'United States','T19','2023-07-22','Ede
('M26','Netherlands','Portugal',1,0,'Netherlands','T17','2023-07-23','Forsyt
('M27','United States','Netherlands ',1,1,'draw','T01','2023-07-27','Welling
('M28','Portugal','Vietnam ',2,0,'Portugal','T18','2023-07-27','Waikato Stad
('M29','Portugal','United States',0,0,'draw','T01','2023-08-1','Eden Park Au
('M30','Vietnam','Netherlands',0,7,'Netherlands','T17','2023-08-01','Forsyth
('M31','France','Jamaica',0,0,'draw','T01','2023-07-23','Sydney Football');
('M32','Brazil' ,'Panama',4,0,'Brazil','T21','2023-07-24','Hindmarsh Stadium
('M33','France','Brazil',2,1,'France','T22','2023-07-29','Lang Park Brisbane
```

Output:

matchid	hometeam	awayteam	hometeam_score	awayteam_score	winner	teamid	matchdate	stadium
M01	New Zealand	Norway	1	0	New Zealand	T01	2023-07-20	Eden Park Auckland
M02	Philippines	Switzerland	0	2	Switzerland	T04	2023-07-21	Forsyth Barr
M03	New Zealand	Philippines	0	1	Philippines	T03	2023-07-25	Wellington Regional
M04	Switzerland	Norway	0	0	draw	T01	2023-07-25	Waikato
M05	Switzerland	New Zealand	0	0	draw	T01	2023-07-30	Forsyth Barr Dunedin
M06	Norway	Philippines	6	0	Norway	T02	2023-07-30	Eden Park Auckland
M07	Australia	Republic of Ireland	1	0	Australia	T05	2023-07-20	Stadium Australia Sydney
M08	Nigeria	Canada	0	0	draw	T01	2023-07-21	Melbourne Rectangular
M09	Canada	Republic of Ireland	2	1	Canada	T08	2023-07-26	Perth Rectangular Perth
M10	Australia	Nigeria	2	3	Nigeria	T07	2023-07-27	Lang Park Brisbane
M11	Canada	Australia	0	4	Australia	T05	2023-07-31	Melbourne Rectangular
M12	Republic of Ireland	Nigeria	0	0	draw	T01	2023-07-31	Lang Park Brisbane
M13	Spain	Costa Rica	3	0	Spain	T11	2023-07-21	Wellington Regional
M14	Zambia	Japan	0	5	Japan	T10	2023-07-22	Waikato Stadium
M15	Japan	Costa Rica	2	0	Japan	T10	2023-07-26	Forsyth Barr
M16	Spain	Zambia	5	0	Spain	T11	2023-07-26	Eden Park Auckland
M17	Japan	Spain	4	0	Japan	T11	2023-07-31	Wellington Regional
M18	Costa Rica	Zambia	1	3	Zambia	T12	2023-07-31	Waikato Stadium Hamilton
M19	England	Haiti	1	0	England	T15	2023-07-22	Lang Park Brisbane
M20	Denmark	China	1	0	Denmark	T14	2023-07-22	Perth Rectangular
M21	England	Denmark	1	0	England	T15	2023-07-28	Sydney Football
M22	China	Haiti	1	0	China	T13	2023-07-28	Hindmarsh Stadium
M23	China	England	1	6	England	T15	2023-08-01	Hindmarsh Stadium
M24	Haiti	Denmark	0	2	Denmark	T14	2023-08-01	Perth Rectangular
M25	United States	Vietnam	3	0	United States	T19	2023-07-22	Eden Park Auckland
M26	Netherlands	Portugal	1	0	Netherlands	T17	2023-07-23	Forsyth Barr
M27	United States	Netherlands	1	1	draw	T01	2023-07-27	Wellington Regional
M28	Portugal	Vietnam	2	0	Portugal	T18	2023-07-27	Waikato Stadium
M29	Portugal	United States	0	0	draw	T01	2023-08-01	Eden Park Auckland
M30	Vietnam	Netherlands	0	7	Netherlands	T17	2023-08-01	Forsyth Barr
M31	France	Jamaica	0	0	draw	T01	2023-07-23	Sydney Football
M32	Brazil	Panama	4	0	Brazil	T21	2023-07-24	Hindmarsh Stadium
M33	France	Brazil	2	1	France	T22	2023-07-29	Lang Park Brisbane
M34	Panama	Jamaica	0	1	Jamaica	T23	2023-07-29	Perth Rectangular
M35	Panama	France	3	6	France	T22	2023-08-02	Sydney Football
M36	Jamaica	Brazil	0	0	draw	T01	2023-08-02	Melbourne Rectangular
M37	Sweden	South Africa	2	1	Sweden	T28	2023-07-23	Wellington Regional
M38	Italy	Argentina	1	0	Italy	T26	2023-07-24	Eden Park Auckland
M39	Argentina	South Africa	2	2	draw	T01	2023-07-28	Forsyth Barr
M40	Sweden	Italy	5	0	Sweden	T28	2023-07-29	Wellington Regional
M41	Argentina	Sweden	0	2	Sweden	T28	2023-08-02	Waikato Stadium
M42	South Africa	Italy	3	2	South Africa	T27	2023-08-02	Wellington Regional
M43	Germany	Morocco	6	0	Germany	T30	2023-07-24	Melbourne Rectangular

Sample data for champ

For sample data in champ table data include in for champed, champ_name, matchid, teamid. and used ‘INSERT INTO’ command for input data.

Implementation:

```
INSERT INTO champ VALUES('CH01','Group A match','M01','T01');
INSERT INTO champ VALUES('CH02','Group A match','M02','T04');
INSERT INTO champ VALUES('CH03','Group A match','M03','T03');
INSERT INTO champ VALUES('CH04','Group A match','M04','T01');
INSERT INTO champ VALUES('CH05','Group A match','M05','T01');
INSERT INTO champ VALUES('CH06','Group A match','M06','T02');
INSERT INTO champ VALUES('CH07','Group B match','M07','T05');
INSERT INTO champ VALUES('CH08','Group B match','M08','T01');
INSERT INTO champ VALUES('CH09','Group B match','M09','T08');
INSERT INTO champ VALUES('CH10','Group B match','M10','T07');
INSERT INTO champ VALUES('CH11','Group B match','M11','T05');
INSERT INTO champ VALUES('CH12','Group B match','M12','T01');
INSERT INTO champ VALUES('CH13','Group C match','M13','T11');
INSERT INTO champ VALUES('CH14','Group C match','M14','T10');
INSERT INTO champ VALUES('CH15','Group C match','M15','T10');
INSERT INTO champ VALUES('CH16','Group C match','M16','T11');
INSERT INTO champ VALUES('CH17','Group C match','M17','T11');
INSERT INTO champ VALUES('CH18','Group C match','M18','T12');
INSERT INTO champ VALUES('CH19','Group D match','M19','T15');
INSERT INTO champ VALUES('CH20','Group D match','M20','T14');
INSERT INTO champ VALUES('CH21','Group D match','M21','T15');
INSERT INTO champ VALUES('CH22','Group D match','M22','T13');
INSERT INTO champ VALUES('CH23','Group D match','M23','T15');
INSERT INTO champ VALUES('CH24','Group D match','M24','T14');
INSERT INTO champ VALUES('CH25','Group E match','M25','T19');
INSERT INTO champ VALUES('CH26','Group E match','M26','T17');
INSERT INTO champ VALUES('CH27','Group E match','M27','T01');
INSERT INTO champ VALUES('CH28','Group E match','M28','T18');
INSERT INTO champ VALUES('CH29','Group E match','M29','T01');
INSERT INTO champ VALUES('CH30','Group E match','M30','T17');
INSERT INTO champ VALUES('CH31','Group F match','M31','T01');
INSERT INTO champ VALUES('CH32','Group F match','M32','T21');
INSERT INTO champ VALUES('CH33','Group F match','M33','T22');
```

Output:

champid	champ_name	matchid	teamid
CH01	Group A match	M01	T01
CH02	Group A match	M02	T04
CH03	Group A match	M03	T03
CH04	Group A match	M04	T01
CH05	Group A match	M05	T01
CH06	Group A match	M06	T02
CH07	Group B match	M07	T05
CH08	Group B match	M08	T01
CH09	Group B match	M09	T08
CH10	Group B match	M10	T07
CH11	Group B match	M11	T05
CH12	Group B match	M12	T01
CH13	Group C match	M13	T11
CH14	Group C match	M14	T10
CH15	Group C match	M15	T10
CH16	Group C match	M16	T11
CH17	Group C match	M17	T11
CH18	Group C match	M18	T12
CH19	Group D match	M19	T15
CH20	Group D match	M20	T14
CH21	Group D match	M21	T15
CH22	Group D match	M22	T13
CH23	Group D match	M23	T15
CH24	Group D match	M24	T14
CH25	Group E match	M25	T19
CH26	Group E match	M26	T17
CH27	Group E match	M27	T01
CH28	Group E match	M28	T18
CH29	Group E match	M29	T01
CH30	Group E match	M30	T17
CH31	Group F match	M31	T01
CH32	Group F match	M32	T21
CH33	Group F match	M33	T22
CH34	Group F match	M34	T23
CH35	Group F match	M35	T22
CH36	Group F match	M36	T01
CH37	Group G match	M37	T28
CH38	Group G match	M38	T26
CH39	Group G match	M39	T01
CH40	Group G match	M40	T28
CH41	Group G match	M41	T28
CH42	Group G match	M42	T27
CH43	Group H match	M43	T30
CH44	Group H match	M44	T29
CH45	Group H match	M45	T32

Mysql query

This purpose of using mysql queries is manipulate and manage data in Mysql database. Queries are supposed to do various operations in the database. In this queries results are very important for users. Because after run this queries user can get usefull information. I wish to know about using queries is manage and manipulate data in table simply and without any problem.

1.) **Get the championship name and the matchid**

User can have information about championship name and matchid.

```
SELECT champ_name, matchid FROM champ;
```

Output:

champ_name	matchid
Group A match	M01
Group A match	M02
Group A match	M03
Group A match	M04
Group A match	M05
Group A match	M06
Group B match	M07
Group B match	M08
Group B match	M09
Group B match	M10
Group B match	M11
Group B match	M12
Group C match	M13
Group C match	M14
Group C match	M15
Group C match	M16
Group C match	M17
Group C match	M18
Group D match	M19
Group D match	M20
Group D match	M21
Group D match	M22
Group D match	M23
Group D match	M24
Group E match	M25
Group E match	M26
Group E match	M27
Group E match	M28
Group E match	M29
Group E match	M30
Group F match	M31
Group F match	M32
Group F match	M33
Group F match	M34
Group F match	M35
Group F match	M36
Group G match	M37
Group G match	M38

2.) get matches that happen after a specific date.

User can get data of matches that held after specific date.

```
SELECT * FROM matches WHERE matchdate > '2023-07-25';
```

Output:

matchid	hometeam	awayteam	hometeam_score	awayteam_score	winner	teamid	matchdate	stadium
M05	Switzerland	New Zealand	0	0	draw	T01	2023-07-30	Forsyth Barr Dunedin
M06	Norway	Philippines	6	0	Norway	T02	2023-07-30	Eden Park Auckland
M09	Canada	Republic of Ireland	2	1	Canada	T08	2023-07-26	Perth Rectangular Perth
M10	Australia	Nigeria	2	3	Nigeria	T07	2023-07-27	Lang Park Brisbane
M11	Canada	Australia	0	4	Australia	T05	2023-07-31	Melbourne Rectangular
M12	Republic of Ireland	Nigeria	0	0	draw	T01	2023-07-31	Lang Park Brisbane
M15	Japan	Costa Rica	2	0	Japan	T10	2023-07-26	Forsyth Barr
M16	Spain	Zambia	5	0	Spain	T11	2023-07-26	Eden Park Auckland
M17	Japan	Spain	4	0	Japan	T11	2023-07-31	Wellington Regional
M18	Costa Rica	Zambia	1	3	Zambia	T12	2023-07-31	Waikato Stadium Hamilton
M21	England	Denmark	1	0	England	T15	2023-07-28	Sydney Football
M22	China	Haiti	1	0	China	T13	2023-07-28	Hindmarsh Stadium
M23	China	England	1	6	England	T15	2023-08-01	Hindmarsh Stadium
M24	Haiti	Denmark	0	2	Denmark	T14	2023-08-01	Perth Rectangular
M27	United States	Netherlands	1	1	draw	T01	2023-07-27	Wellington Regional
M28	Portugal	Vietnam	2	0	Portugal	T18	2023-07-27	Waikato Stadium
M29	Portugal	United States	0	0	draw	T01	2023-08-01	Eden Park Auckland
M30	Vietnam	Netherlands	0	7	Netherlands	T17	2023-08-01	Forsyth Barr
M33	France	Brazil	2	1	France	T22	2023-07-29	Lang Park Brisbane
M34	Panama	Jamaica	0	1	Jamaica	T23	2023-07-29	Perth Rectangular
M35	Panama	France	3	6	France	T22	2023-08-02	Sydney Football
M36	Jamaica	Brazil	0	0	draw	T01	2023-08-02	Melbourne Rectangular
M39	Argentina	South Africa	2	2	draw	T01	2023-07-28	Forsyth Barr
M40	Sweden	Italy	5	0	Sweden	T28	2023-07-29	Wellington Regional
M41	Argentina	Sweden	0	2	Sweden	T28	2023-08-02	Waikato Stadium
M42	South Africa	Italy	3	2	South Africa	T27	2023-08-02	Wellington Regional
M45	South Korea	Morocco	0	1	Morocco	T32	2023-07-30	Hindmarsh Stadium
M46	Germany	Colombia	1	2	Colombia	T29	2023-07-30	Sydney Football
M47	South Korea	Germany	1	1	draw	T01	2023-08-03	Lang Park
M48	Morocco	Colombia	1	0	Morocco	T32	2023-08-03	Perth Rectangular
M49	Switzerland	Spain	1	5	Spain	T11	2023-08-05	Eden Park Auckland
M50	Japan	Norway	3	1	Japan	T10	2023-08-05	Wellington Regional
M51	Netherlands	South Africa	2	0	Netherlands	T17	2023-08-06	Sydney Football
M52	Sweden	United States	5	4	Sweden	T19	2023-08-06	Melbourne Rectangular
M53	England	Nigeria	4	2	England	T15	2023-08-07	Lang Park Brisbane
M54	Australia	Denmark	2	0	Australia	T05	2023-08-06	Stadium Australia
M55	Colombia	Jamaica	1	0	Colombia	T29	2023-08-08	Melbourne Rectangular
M56	France	Morocco	4	0	France	T22	2023-08-08	Hindmarsh Stadium
M57	Spain	Netherlands	2	1	Spain	T11	2023-08-11	Wellington Regional
M58	Japan	Sweden	1	2	Sweden	T28	2023-08-11	Eden Park Auckland
M59	Australia	France	7	6	Australia	T05	2023-08-12	Lang Park
M60	England	Colombia	2	1	England	T15	2023-08-12	Stadium Australia Sydney
M61	Spain	Sweden	2	1	Spain	T11	2023-08-15	Eden Park Auckland
M62	Australia	England	1	3	England	T15	2023-08-16	Stadium Australia Sydney
M63	Sweden	Australia	2	0	Sweden	T28	2023-08-19	Lang Park Brisbane
M64	Spain	England	1	0	Spain	T11	2023-08-20	Stadium Australia Sydney

3.) get players above a specific age.

Can get information about players after specific age.

```
SELECT playerName, age
FROM player
WHERE age > 25;
```

Output:

playerName	age
Erin Nayler	31
Ria Percival	33
CJ Bott	28
Ali Riley	35
Daisy Cleverley	26
Deborah Abiodun	32
Megan Connolly	26
Diane Caldwell	35
Denise Sullivan	35
Katie McCabe	29
Betsy Hassett	30
Maria Coto	26
Mariana Benavides	26
Valeria del Campo	26
Carol Sanchez	26
Melissa Herrera	26
Mariela Campos	26
Maria Paula Salas	26
Rebekah Stott	34
Gloriana Villalobos	26
Raquel Rodriguez	26
Maria Paula Elizondo	26
Emilie Valenciano	26
Priscila Chinchilla	26
Cristin Granados	26
Ayaka Yamashita	26
Risa Shimizu	27
Moeka Minami	28
Hinata Miyazawa	27
Hikaru Naomoto	28
Riko Ueki	29
Fuka Nagano	30
Mina Tanaka	29
Aitana Bonmati	26
Irene Guerrero	27
Mariona Caldentey	28
Esther Gonzalez	34
Cecilie Fiskerstrand	34
Eva Navarro	26
Catherine Musonda	27
Judith Soko	26
Lushomo Mweemba	27
Mary Mulenga	34

4.) Get playernames, age and caps above a specific caps.

Can get information about player name, age and caps after specific caps

```
SELECT playerName, age, caps
FROM player
WHERE caps > 75;
```

Output:

playerName	age	caps
Uchenna Kanu	24	82
Oluwatosin Demehin	21	83
Courtney Brosnan	23	94
Claire Riordan	24	98
Megan Connolly	26	94
Katie McCabe	29	151
Moeka Minami	28	123
Paige Satchell	22	84
Ivana Andres	25	83
Mariona Caldentey	28	95
Alexia Putellas	22	84
Judith Soko	26	96
Mary Wilombe	26	85
Martha Tembo	27	93
Agness Musase	29	95
Wang Linlin	23	76
Wang Shuang	26	84
Yao Wei	27	83
Lene Christensen	30	89
Josefine Hasbo	34	124
Merel van Dongen	30	76
Sherida Spitse	33	76
Danielle van de Donk	35	98
Nguyen Thi Thuy Hang	34	134
Isabella Flanigan	27	76
Lia Walti	31	142
Marion Rey	32	123
Lydia Williams	21	76
Emily van Egmond	31	78
Christine Sinclair	23	76
Vanessa Gilles	25	86
Osinachi Ohale	25	76
Glory Ogbonna	26	87
Asisat Oshoala	30	100

5.) Get playersname, age and goals above a specific goals.

Can get information about player name, age and goals after specific goal limit.

```
select playername, age, goals
from player
WHERE goals > 5;
```

Output:

playername	age	goals
Ria Percival	33	15
Ruesha Littlejohn	23	7
Denise Sullivan	35	6
Katie McCabe	29	18
Lucy Quinn	23	9
Risa Shimizu	27	6
Moeka Minami	28	9
Yui Hasegawa	23	7
Laia Codina	25	65
Eva Navarro	26	76
Susan Banda	23	9
Wu Haiyan	24	10
Josefine Hasbo	34	8
Jill Baijings	23	6
Caitlin Dijkstra	27	9
Tran Thi Kim Thanh	23	8
Nguyen Thi Thuy Hang	34	12
Oihane Hernandez	23	45
Quinn	28	6

6.) Get player data with the minimum number of goals.

Can get player information about who has scored minimum number of goals

```
SELECT p.playerName, p.goals
FROM player p
WHERE p.goals = (SELECT MIN(goals) FROM player);
```

Output:

playerName	goals
Erin Nayler	0
Claudia Bunge	0
Michaela Foster	0
Malia Steinmetz	0
Ali Riley	0
Deborah Abiodun	0
Chloe Mustaki	0
Olivia Chance	0
Lily Agg	0
Saki Kumagai	0
Shiori Miyake	0
Hana Takahashi	0
Jun Endo	0
Aoba Fujino	0
Misa Rodriguez	0
Ona Batlle	0
Teresa Abelleira	0
Ivana Andres	0
Aitana Bonmati	0
Irene Guerrero	0
Mariona Caldentey	0
Cecilie Fiskerstrand	0
Catherine Musonda	0
Judith Soko	0
Hellen Mubanga	0
Comfort Selemani	0
Barbra Banda	0
Evarine Katongo	0
Wang Shuang	0
Tuva Hansen	0
Xu Huan	0
Yang Lina	0
Lou Jiahui	0
Chen Qiaozhu	0
Lene Christensen	0
Simone Boye Sorensen	0
Maren Mjeldn	0
Sherly Jeudy	0
Sherida Spitse	0
Katja Snoeijs	0
Danielle van de Donk	0
Renate Jansen	0
Jackie Groenen	0
Ines Pereira	0

7.) get team names and their respective coaches using a join.

Can gat information of team name and coach name using join function.

```
SELECT t.teamname, c.coachname
FROM team t
LEFT JOIN coach c ON t.Coachid = c.coachid;
```

Output:

teamname	coachname
New zealand	Pitka Klimkova
Norway	Hege Riise
Philippines	Alen StaPcic
Switzerland	Inka Grings
Australia	Tony Gustavsson
Canada	Bev Priestman
Nigeria	Randy Waldrum
Republic of Ireland	Vera Pauw
Costa Rica	Amelia Valverde
Japan	Futoshi Ikeda
Spain	Porge Vilda
Zambia	Bruce Mwape
China	Shui Tingxia
Denmark	Lars Sondergaard
England	Sarina Wiegman
Haiti	Nicolas Delepine
Netherland	Andries Ponker
Portugal	Francisco Neto
United States	Vlatko Andonovski
Vietnam	Mai duc Chung
Brazil	Pia Sundhage
France	Herve Renard
Jamaica	Lorne Donaldson
Panama	Ignacio Tuintana
Argentina	German Portanova
Italy	Milena Bertolini
South Africa	Desiree Ellis
Sweden	Peter Gerhardsson
Colombia	Nelson Abadia
Germany	Martina Voss-Tecklenburg
South Korea	Colin Bell
Morocco	Reynald Pedros

8.) Get the Position, playername, and teamname using a join between player and team .

```
SELECT p.playerName, p.Position, t.teamname
FROM player p
JOIN team t ON p.teamid = t.teamid;
```

Output:

playerName	Position	teamname
Erin Nayler	GK	New zealand
Ria Percival	MF	New zealand
Claudia Bunge	DF	New zealand
CJ Bott	DF	New zealand
Michaela Foster	DF	New zealand
Malia Steinmetz	MF	New zealand
Ali Riley	DF	New zealand
Daisy Cleverley	MF	New zealand
Gabi Rennie	MF	New zealand
Annalie Longo	MF	New zealand
Olivia Chance	MF	New zealand
Betsy Hassett	MF	New zealand
Rebekah Stott	DF	New zealand
Katie Bowen	DF	New zealand
Paige Satchell	FW	New zealand
Cecilie Fiskerstrand	GK	Norway
Anja Sonstevold	DF	Norway
Sara Horte	DF	Norway
Tuva Hansen	DF	Norway
Maren Mjeldn	DF	Norway
Ingrid Syrstad Engen	MF	Norway
Vilde Boe Risa	MF	Norway
Karina Savik	FW	Norway
Caroline Graham Hansen	MF	Norway
Guro Reiten	GK	Norway
Guro Pettersen	MF	Norway
Thea Bjelde	FW	Norway
Ada Hegerberg	MF	Norway
Amalie Eikeland	MF	Norway
Olivia McDaniel	GK	Philippines
Malea Cesar	DF	Philippines
Jessika Cowart	DF	Philippines
Jaclyn Sawicki	MF	Philippines
Hali Long	DF	Philippines
Tahnai Annis	MF	Philippines
Sarina Bolden	FW	Philippines
Sara Eggesvik	MF	Philippines
Isabella Flanigan	FW	Philippines
Chandler McDaniel	FW	Philippines
Anicka Castaneda	MF	Philippines
Ryley Bugay	MF	Philippines
Angela Beard	DF	Philippines
Meryll Serrano	FW	Philippines
Carleigh Frilles	FW	Philippines

9.) Count the number of matches each team.

Can count the matches of each team.

```
SELECT t.teamname, COUNT(m.matchid) AS match_count
FROM team t
LEFT JOIN matches m ON t.teamid = m.teamid
GROUP BY t.teamname;
```

Output:

teamname	match_count
New zealand	11
Norway	1
Philippines	1
Switzerland	1
Australia	4
Canada	0
Nigeria	1
Republic of Ireland	1
Costa Rica	0
Japan	3
Spain	7
Zambia	1
China	1
Denmark	2
England	6
Haiti	0
Netherland	3
Portugal	1
United States	2
Vietnam	0
Brazil	1
France	3
Jamaica	1
Panama	0
Argentina	0
Italy	1
South Africa	1
Sweden	5
Colombia	3
Germany	1
South Korea	0
Morocco	2

Advance features

1.) Retrieve player information according teamid.

So in this feature can get data of provided teamid. User can input any data that need.

```
DELIMITER //

CREATE PROCEDURE PlayerInfo(IN team_id CHAR(4))
BEGIN
    SELECT * FROM player WHERE teamid = team_id;
END //

DELIMITER ;
```

Execute:

```
-- execute
CALL PlayerInfo('T04');
```

Output:

Playerid	playerName	Position	teamid	age	caps	goals
P46	Gaelle Thalmann	GK	T04	29	32	0
P47	Julia Stierli	DF	T04	24	12	2
P48	Lara Marti	DF	T04	21	23	2
P49	Laura Felber	DF	T04	22	56	2
P50	Noelle Maritz	DF	T04	23	13	3
P51	Geraldine Reuteler	MF	T04	24	15	1
P52	Amira Arfaoui	FW	T04	25	23	1
P53	Nadine Riesen	DF	T04	26	45	2
P54	Ana Maria Crnogorcevic	FW	T04	27	6	3
P55	Ramona Bachmann	FW	T04	28	5	1
P56	Coumba Sow	MF	T04	29	54	2
P57	Livia Peng	GK	T04	30	43	1
P58	Lia Walti	MF	T04	31	142	3
P59	Marion Rey	MF	T04	32	123	1
P60	Luana Buhler	DF	T04	20	31	1

2.) Updates the number of goals according to the player.

In this feature user can update the goals for any player. This easy to user if any player got new goals can update goals through this.

```
DELIMITER //

CREATE PROCEDURE PlayerGoals(IN player_id CHAR(9), IN new_goals INT)
BEGIN
    UPDATE player SET goals = new_goals WHERE Playerid = player_id;
END //

DELIMITER ;
```

Execute:

```
-- execute
CALL PlayerGoals('P100', 10);
```

In this case about output user need to run player table for check.

3.) Return details about specific match.

In this feature user can get any data about specific match. So its easy to use for Get any Match.

```
DELIMITER //

CREATE PROCEDURE MatchInfo(IN match_id CHAR(6))
BEGIN
    SELECT * FROM matches WHERE matchid = match_id;
END //

DELIMITER ;
```

Execute:

```
-- execute
CALL MatchInfo('M01');
```

Output:

matchid	hometeam	awayteam	hometeam_score	awayteam_score	winner	teamid	matchdate	stadium
M01	New Zealand	Norway	1	0	New Zealand	T01	2023-07-20	Eden Park Auckland

4.) This trigger updates the number of caps for a player when a new match is insert.

In this trigger if user add to new match to the table it will update the caps of each player that played that match. For check it user can run tables can check if its updated or not.

```
DELIMITER //

CREATE TRIGGER CapsOnMatch
AFTER INSERT ON matches
FOR EACH ROW
BEGIN
    UPDATE player SET caps = caps + 1 WHERE player.teamid = NEW.teamid;
END //

DELIMITER ;
```

Testing:

```
INSERT INTO matches VALUES('M80','New Zealand','Norway',1,0,'New Zealand','T01','2023-09-20','Eden Park Auckland');
```

After this user need to run player tables and see updated caps.

5.) This trigger prevent deletion of coach

In this trigger what happen is its prevent the deletion of coach. So if user try to delete any coach that connect with each team it return the error massage that coach cannot delete.

```
DELIMITER //

CREATE TRIGGER stopCoachDelete
BEFORE DELETE ON coach
FOR EACH ROW
BEGIN
    DECLARE coach_count INT;
    SELECT COUNT(*) INTO coach_count FROM team WHERE Coachid = OLD.coachid;

    IF coach_count > 0 THEN
        SIGNAL SQLSTATE '55000' SET MESSAGE_TEXT = 'Cannot delete Coach.';
    END IF;
END //

DELIMITER ;
```

Testing:

```
DELETE FROM coach WHERE coachid = 'C01';
```

Output:

```
ERROR 1644 (55000): Cannot delete Coach.
```

Python connectivity

So in this section have to do is connect mysql server through python. For that had to use mysql connector in python code. After had to gave host information, user name, password and database information to python code. In this data made three python files names main.py, FIFA1.py, FIFA2.py.

In FIFA1.py file include sql queries that made through that file can run those queries. In FIFA2.py file can user input data for insert, update and delete operations and can see updated tables after operations. In main.py file is include simple code for run this FIFA1.py and FIFA2.py files.

FIFA1.py

Implementation:

```python
import mysql.connector

# Define SQL queries here
queries = [
    "SELECT playerName, Position FROM player;",
    "SELECT * FROM matches WHERE matchdate > '2023-07-25';",
    "SELECT champ_name, matchid FROM champ;",
    "SELECT p.playerName, p.Position, t.teamname FROM player p JOIN team t ON p.teamid = t.teamid;",
    "SELECT t.teamname, COUNT(m.matchid) AS match_count FROM team t LEFT JOIN matches m ON t.teamid = m.teamid GROUP BY t.teamname;",
    "SELECT playerName, age FROM player WHERE age > 25;",
    "SELECT playerName, age, caps FROM player WHERE age > 25;",
    "SELECT playername, age, goals FROM player WHERE goals > 5;",
    "SELECT p.playerName, p.goals FROM player p WHERE p.goals = (SELECT MIN(goals) FROM player);",
    "SELECT t.teamname, c.coachname FROM team t LEFT JOIN coach c ON t.Coachid = c.coachid;"
]

# Connect to mysql server
conn = mysql.connector.connect(
    host='localhost',
    user='Malith',
    password='@Stcmatara123',
    database='zzzz'
)

# Checking connection
if conn.is_connected():
    print('Connection success')
    cursor = conn.cursor()

    while True:
        print('Choose a query:')
        for i, query in enumerate(queries, 1):
            print(f'{i}. Query {i}: {query}')

        print('0. Exit')

        choice = int(input('Enter choice: '))
        if choice == 0:
            break
        elif choice >= 1 and choice <= len(queries):
            query = queries[choice - 1]
            cursor.execute(query)
            result = cursor.fetchall()
            print(result)
        else:
```

Output:

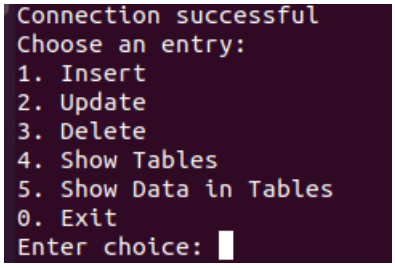
```
Connection success
Choose a query:
1. Query 1: SELECT playerName, Position FROM player;
2. Query 2: SELECT * FROM matches WHERE matchdate > '2023-07-25';
3. Query 3: SELECT champ_name, matchid FROM champ;
4. Query 4: SELECT p.playerName, p.Position, t.teamname FROM player p JOIN team t ON p.teamid = t.teamid;
5. Query 5: SELECT t.teamname, COUNT(m.matchid) AS match_count FROM team t LEFT JOIN matches m ON t.teamid = m.teamid GROUP BY t.teamname;
6. Query 6: SELECT playerName, age FROM player WHERE age > 25;
7. Query 7: SELECT playerName, age, caps FROM player WHERE age > 25;
8. Query 8: SELECT playername, age, goals FROM player WHERE goals > 5;
9. Query 9: SELECT p.playerName, p.goals FROM player p WHERE p.goals = (SELECT MIN(goals) FROM player);
10. Query 10: SELECT t.teamname, c.coachname FROM team t LEFT JOIN coach c ON t.Coachid = c.coachid;
0. Exit
Enter choice:
```

FIFA2.py

Implementation:

```python
import mysql.connector

# Connect
conn = mysql.connector.connect(
    host='localhost',
    user='Malith',
    password='@Stcmatara123',
    database='zzzz'
)

# Checking connection
if conn.is_connected():
    print('Connection successful')
    cursor = conn.cursor()

    while True:
        # Display
        print("Choose an entry:")
        print("1. Insert")
        print("2. Update")
        print("3. Delete")
        print("4. Show Tables")
        print("5. Show Data in Tables")
        print("0. Exit")
        choice = int(input("Enter choice: "))

        if choice == 0:
            break

        if choice == 1:
            # Insert
            query = input('Enter the INSERT data: ')
            cursor.execute(query)
            conn.commit()
            print('INSERT completed.')

        elif choice == 2:
            # Update
            query = input('Enter the UPDATE data: ')
            cursor.execute(query)
            conn.commit()
            print('UPDATE completed.')

        elif choice == 3:
            # Delete
```

Output:



Summery

In this whole data base assignment I have achived many things. Few examples are Database Creation, proper implementation about sql queries, manipulate data through python and connectivity, how to user can do input extra. As challenges that I had faced is collect sample data for this tables. I had to create my own values for this implementation and its took more time. While some students use csv files for load sample data.

I like to upgrade this database with more features. And include many world cup years. And many data about players. In this current database I only create database for 202 FIFA women world cup. So I like to add many years for this. Also in advance features I like to views category. In this database I only implement two categories that stored procedurs and triggers.

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