

Complexes(cid, location, totalOccupiedArea, chiefOrganizer)
 DesignatedFor(complexID, sportsName, locIndicator)
 Sports(name, idComplex)
 Events(eventID, duration, participantsNo, date, description, complexID, location)
 Officiates(officialsID, eventNo)
 Officials(id, name, dateOfBirth)
 NeedsEquip(equipNo, idEvent)
 Equipments(equipNo, weight, height, name, cost)

```

CREATE TABLE Complexes (
    cid CHAR(12) PRIMARY KEY,
    location VARCHAR(15),
    totalOccupied INT,
    chiefOrganizer VARCHAR(20)
);
  
```

```

CREATE TABLE DesignatedFor (
    complexID CHAR(12),
    sportsName VARCHAR(15),
    locIndicator CHAR(10),
    PRIMARY KEY (complexID, sportsName)
    FOREIGN KEY (sportsName) REFERENCES Sports(name) ON DELETE CASCADE
    FOREIGN KEY (complexID) REFERENCES Complexes(cid) ON DELETE CASCADE
);
  
```

```

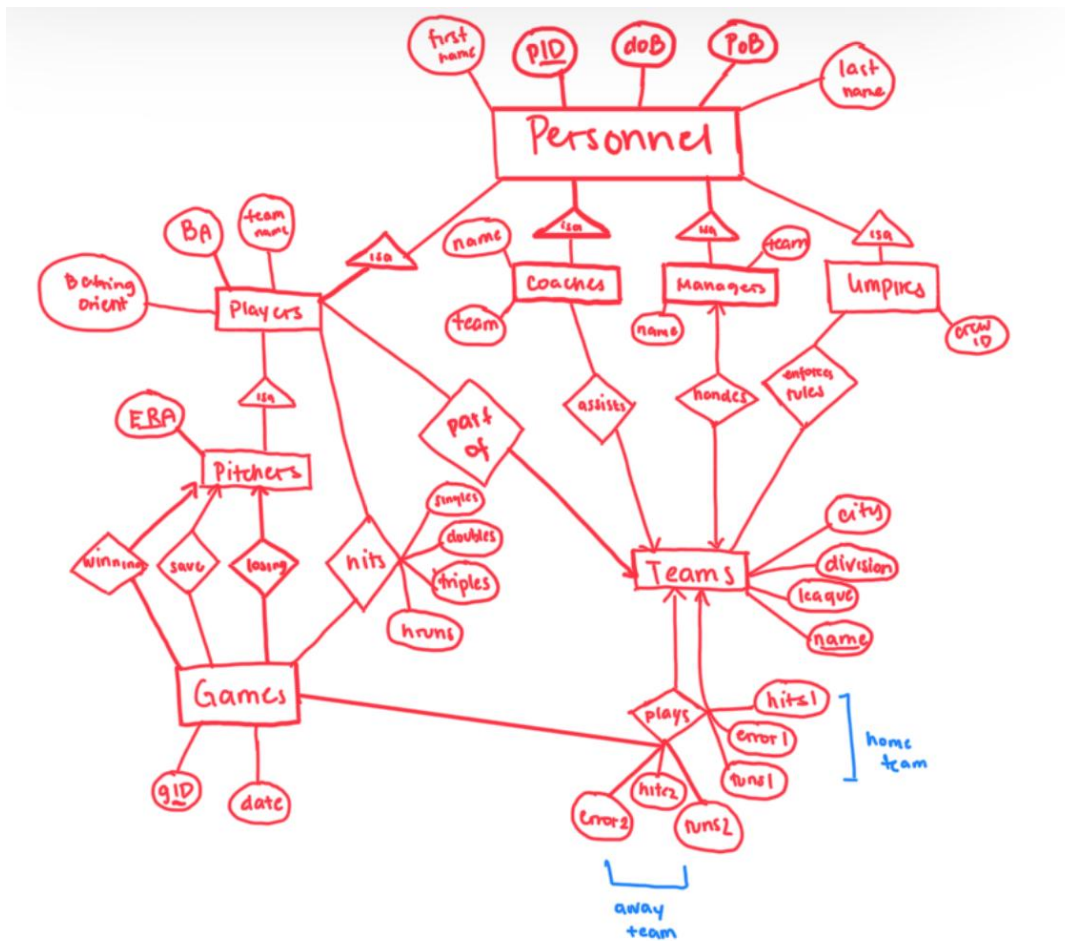
CREATE TABLE Sports (
    name VARCHAR(15) PRIMARY KEY,
    idComplex CHAR(12),
    FOREIGN KEY (idComplex) REFERENCES Complexes(cid) ON DELETE CASCADE
);
  
```

```

CREATE TABLE Events (
    eventID CHAR(12) PRIMARY KEY,
    location VARCHAR(15),
    duration FLOAT,
    participantsNo INT,
    description VARCHAR(150),
    date DATE,
    complexID CHAR(12),
    FOREIGN KEY (complexID) REFERENCES Complexes(cID) ON DELETE CASCADE
    FOREIGN KEY (location) REFERENCES Complexes(loc) ON DELETE CASCADE
);
CREATE TABLE Officiates (
    officialsID CHAR(12),
    eventNo CHAR(12),
    PRIMARY KEY (eventNo, officialsID),
    FOREIGN KEY (eventNo) REFERENCES Events(eventID) ON DELETE CASCADE,
    FOREIGN KEY (officialsID) REFERENCES Officials(ID) ON DELETE CASCADE
);
CREATE TABLE Officials (
    id CHAR(12) PRIMARY KEY,
    name VARCHAR(15),
    dateOfBirth CHAR(17),
    eventNo CHAR(12),
    FOREIGN KEY (eventNo) REFERENCES Events(eventID) ON DELETE CASCADE
);
CREATE TABLE NeedsEquip (
    equipNo CHAR(12),
    idEvent CHAR(12),
    PRIMARY KEY (equipNo, idEvent)
    FOREIGN KEY (idEvent) REFERENCES Events(eventID) ON DELETE CASCADE
);
CREATE TABLE Equipments (
    equip CHAR(12) PRIMARY KEY,
    name VARCHAR(30),
    weight FLOAT,
    height FLOAT,
    cost FLOAT,
    eventID CHAR(12),
    FOREIGN KEY (eventID) REFERENCES Events(eventID) ON DELETE CASCADE
);

```

2.



Personnel(pID, firstName, lastName, dateOfBirth, placeOfBirth)

Players(pID, name, BA, teamName, battingOrientation)

Coaches(pID, name, team)

Managers(pID, name)

Umpires(pID, crewID, name)

Games(gID, date, winPitcher, losePitcher, savePitcher)

Pitches(pID, ERA)

Hits(pID, gID, singles, doubles, triples, hrns)

Teams(name, managerID, city, division, league)

Plays(gID, team1, team2, errors2, hits2, runs2, hits1, errors1, runs1)

```
CREATE TABLE Personnel (
    pID CHAR(12) PRIMARY KEY,
    firstName VARCHAR(10),
    lastName VARCHAR(15),
    dateOfBirth CHAR(17),
    placeOfBirth VARCHAR(25),
```

);

```
CREATE TABLE Players (  
    playerID CHAR(12) PRIMARY KEY REFERENCES Personnel(pid),  
    name VARCHAR(20)  
    battingAvg FLOAT,  
    battingOrientation CHAR(10),  
    teamName VARCHAR(30),  
    FOREIGN KEY (teamName) REFERENCES Teams(name) ON DELETE CASCADE  
);
```

```
CREATE TABLE Coaches (  
    coachID CHAR(12) PRIMARY KEY REFERENCES Personnel(pid),  
    name VARCHAR(20)  
    team VARCHAR(30),  
    FOREIGN KEY (team) REFERENCES Teams(name) ON DELETE CASCADE  
);
```

```
CREATE TABLE Managers(  
    ID CHAR(12) PRIMARY KEY REFERENCES Personnel(pid),  
    name VARCHAR(20)  
);
```

```
CREATE TABLE Umpires(  
    crewID CHAR(12),  
    pid CHAR(12),  
    name VARCHAR(20),  
    PRIMARY KEY (crewID, pid)  
);
```

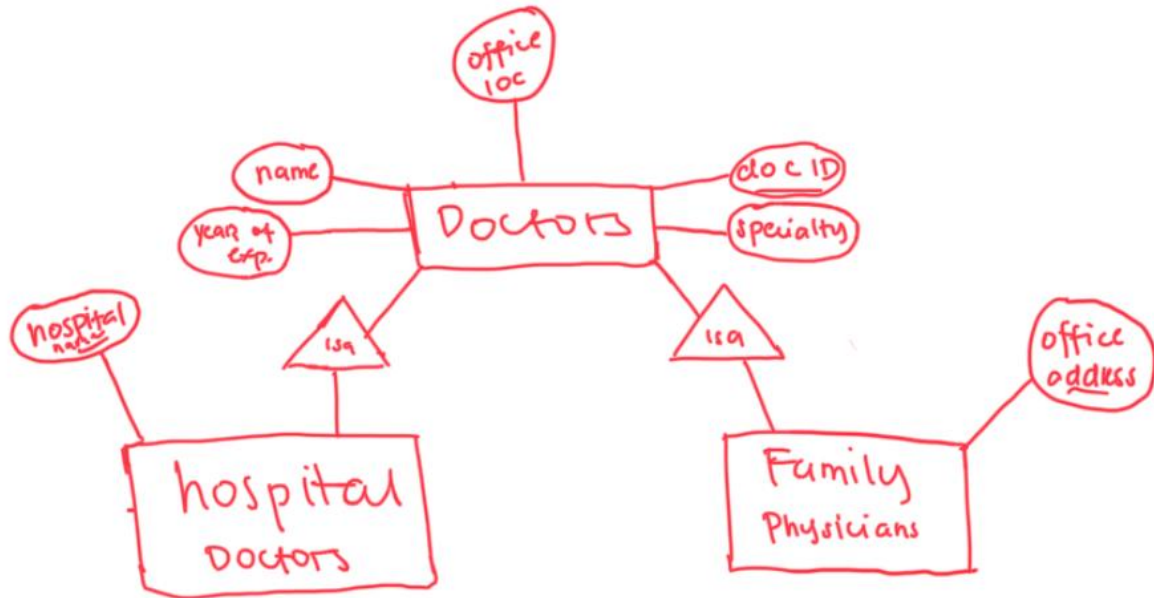
```
CREATE TABLE Games (  
    gid CHAR(12),  
    date DATE,  
    winPitcher VARCHAR(30),  
    losePitcher VARCHAR(30),  
    savePitcher VARCHAR(30),  
    FOREIGN KEY (winPitcher) REFERENCES Pitchers(pitcherID) ON DELETE CASCADE  
    FOREIGN KEY (losePitcher) REFERENCES Pitchers(pitcherID) ON DELETE  
    CASCADE  
    FOREIGN KEY (savePitcher) REFERENCES Pitchers(pitcherID) ON DELETE  
    CASCADE  
);  
CREATE TABLE Pitchers (  
    pitcherID CHAR(12) PRIMARY KEY REFERENCES Players(pid),  
    era FLOAT,  
);
```

```
CREATE TABLE Hits (  
    idPlayer CHAR(12),  
    gameId CHAR(12),  
    singles INT,  
    doubles INT,  
    triples INT,  
    hruns INT,  
    PRIMARY KEY (idPlayer, gameId)  
    FOREIGN KEY (idPlayer) REFERENCES Player(pid) ON DELETE CASCADE  
    FOREIGN KEY (gameID) REFERENCES Games(gid) ON DELETE CASCADE  
);
```

```
CREATE TABLE Teams(  
    name VARCHAR(15) PRIMARY KEY,  
    city CHAR(15),  
    division VARCHAR(35),  
    league VARCHAR(35),  
    managerID CHAR(10),  
    FOREIGN KEY (managerID) REFERENCES Managers(pid),  
);
```

```
CREATE TABLE Plays (  
    gid CHAR(12) PRIMARY KEY REFERENCES Games(gid)  
    team1 VARCHAR(30),  
    team2 VARCHAR(30),  
    errors1 INT,  
    runs1 INT,  
    hits1 INT,  
    errors2 INT,  
    runs2 INT,  
    hits2 INT,  
    FOREIGN KEY (team1) REFERENCES Teams(name) ON DELETE CASCADE  
    FOREIGN KEY (team2) REFERENCES Teams(name) ON DELETE CASCADE  
);
```

3.



Doctors(docid, name, specialty, experience, hospitalName, officeAddress)
 HospitalDoctors(docid, name, specialty, experience, hospitalName, officeAddress)
 FamilyPhysicians(docid, name, specialty, experience, hospitalName, officeAddress)

```

CREATE TABLE Doctors (
    docid VARCHAR(10) PRIMARY KEY,
    name VARCHAR(25),
    specialty VARCHAR(20),
    experience INT
    officeLoc VARCHAR(45),
);
  
```

```

INSERT INTO Doctors
VALUES('1020304050', 'Doctor Strange', Neurosurgeon, 20, 'New York Hospital');
INSERT INTO Doctors
VALUES('1020304050', 'Doctor Strange', Neurosurgeon, 20, 'New York City');
  
```

```

CREATE TABLE HospitalDoctors (
    hospitalID VARCHAR(10),
    hospitalName VARCHAR(20),
    PRIMARY KEY (docid, hospitalName)
    FOREIGN KEY (hospitalID) REFERENCES Doctors(docid)
);
  
```

```

INSERT INTO HospitalDoctors
  
```

```
VALUES('1020304050', 'New York Hospital');
```

```
CREATE TABLE FamilyPhysicians (  
    physicianID VARCHAR(10),  
    officeAddress VARCHAR(20),  
    PRIMARY KEY (physicianID, officeAddress)  
    FOREIGN KEY (physicianID) REFERENCES Doctors(docID)  
);
```

```
INSERT INTO FamilyPhysicians  
VALUES('1020304050', 'New York City');
```