

--Lab 9

```
DROP TABLE IF EXISTS Players;
DROP TABLE IF EXISTS HeadCoaches;
DROP TABLE IF EXISTS AssistantCoaches;
DROP TABLE IF EXISTS Coaches;
DROP TABLE IF EXISTS People;
DROP TABLE IF EXISTS AgeGroup;
DROP TABLE IF EXISTS Teams;
```

```
CREATE TABLE People(
PID SERIAL,
FirstName TEXT NOT NULL,
LastName TEXT NOT NULL,
Address TEXT NOT NULL,
PhoneNumber INT NOT NULL,
PRIMARY KEY (PID)
);
```

```
CREATE TABLE Coaches(
PID SERIAL REFERENCES People(PID),
CID SERIAL,
TeamID INT NOT NULL,
YearsCoached INT NOT NULL,
PRIMARY KEY (CID)
);
```

```
CREATE TABLE HeadCoaches(
CID SERIAL REFERENCES Coaches(CID),
TeamID INT NOT NULL,
HeadCoachID INT NOT NULL
);
```

```
CREATE TABLE AssistantCoaches(
CID SERIAL REFERENCES Coaches(CID),
TeamID INT NOT NULL,
AssistantCoachID INT NOT NULL
);
```

```
CREATE TABLE Players(
PID SERIAL REFERENCES People(PID),
AgeID INT NOT NULL,
Positions TEXT NOT NULL
);
```

```
CREATE TABLE AgeGroup(
AgeID INT NOT NULL,
TeamID INT NOT NULL,
AgeAllowed TEXT NOT NULL,
```

PRIMARY KEY (AgeID)  
);

```
CREATE TABLE Teams(  
TeamID INT NOT NULL,  
HeadCoachID INT NOT NULL,  
AssistantCoachID INT NOT NULL,  
Name TEXT NOT NULL,  
PRIMARY KEY (TeamID)  
);
```

The database is in 3NF because all non-primary keys are dependent on nothing but the primary key in each table.

Functional dependencies:

All columns in People (except PID) are dependent on PID

All columns in Players are dependent on PID

All columns in coaches are Dependent on PID

All columns in Head and Assistant Coaches are dependent on CID

All columns in AgeGroup are dependent on AgeID

All columns in Teams are dependent on TeamID



