

Table: Player

CREAT

TABLE

Players (

```
    Player
    varchar(128),

    Height float(8),

    Weight float(8),

    College
    varchar(128),

    Born int(8),

    Birth_City
    varchar(128),

    Birth_State
    varchar(128),

    PRIMARY KEY
    (Player)

);
```

Candidate Keys: {Player}

F: {Player -> Height, Weight, College, Born, Birth\_City, Birth\_State}

Left-hand side is a superkey, **strictly in 3NF**

(Birth\_State is not considered to be dependent on Birth\_City since two cities may have same name but different State)

Table: Team

```

CREATE
E
TABLE
Team (

        ID int(64),

        Full_Name varchar(128),

        Abbreviation
varchar(128),

        Nickname varchar(128),

        City varchar(128),

        State varchar(128),

        Year_Founded int(8),

        PRIMARY KEY
(Abbreviation)

);

```

Candidate Keys: {Abbreviation}, {ID}, {Full Name}, { Nickname }  
 F: {Abbreviation -> ID, Full\_Name, Abbreviation, Nickname, City, State, Year\_Founded,  
ID -> Abbreviation, Full\_Name, Abbreviation, Nickname, City, State, Year\_Founded ,  
Full Name -> Abbreviation, ID, Abbreviation, Nickname, City, State, Year\_Founded  
Nickname -> Abbreviation, ID, Abbreviation, Nickname, City, State, Year\_Founded}  
 Use Unique to specify other candidate keys

Each left-hand side is a superkey, **strictly in 3NF**

Table: Seasons\_Stats

```
CREATE  
TABLE  
Seasons_Stat  
s (
```

```
Year int(8),
```

```
Player varchar(128),
```

```
Pos varchar(128),
```

```
Age int(8),
```

```
Tm varchar(256),
```

```
G int(8),
```

```
MP int(8),
```

```
PER float(8),
```

```
TS_Percentage float(8),
```

```
FTr float(8),
```

```
OWS float(8),
```

```
DWS float(8),
```

```
FG int(8),
```

```
FGA int(8),
```

```
2P int(8),
```

```
2PA int(8),
```

```
eFG_Percentage float(8),
```

```

        FT int(8),

        FTA int(8),


        TRB int(8),

        AST int(8),

        PF int(8),

        PTS int(8),

        PRIMARY KEY (Player, Year, Tm, Pos),

        FOREIGN KEY (Player) REFERENCES
        Players(Player),

        FOREIGN KEY (Tm) REFERENCES
        Team(Abbreviation)

    );

```

Candidate Keys: {Player, Year, Tm, Pos }

F { Player, Year, Tm, Pos -> all others,

OWS, DWS -> WS,

WS -> WS\_Divide\_48,

FG, FGA -> FG\_Percentage,

2P, 2PA -> 2P\_Percentage,

FT, FTA -> FT\_Percentage

}

Delete WS, WS\_Divide\_48, FG\_Percentage, 2P\_Percentage, FT\_Percentage

Table: Game

CREATE

TABLE

Game (

Game\_ID int(64),

Season\_ID int(64),

Game\_Date varchar(128),

Team\_Abbreviation\_Home varchar(128),

WL\_Home varchar(128),

Min\_Home int(8),

Fgm\_Home int(8),

Ftm\_Home int(8),

Pts\_Home int(8),

Video\_Available\_Home int(8),

Team\_Abbreviation\_Away varchar(128),

Min\_Away int(8),

Fgm\_Away int(8),

Ftm\_Away int(8),

Pts\_Away int(8),

Video\_Available\_Away int(8),

Series\_Leader varchar(128),

PRIMARY KEY (Game\_ID),

FOREIGN KEY (Team\_Abbreviation\_Away) REFERENCES  
Team(Abbreviation),

FOREIGN KEY (Team\_Abbreviation\_Home) REFERENCES  
Team(Abbreviation)

);

Candidate Key: {Game\_ID}

F: {Game\_ID} -> all others

Team\_Abbreviation\_Home -> Team\_ID\_Home, Team\_Name\_Home,

Team\_Nickname\_Home, Team\_City\_Name\_Home, Home\_Team\_ID

Team\_Abbreviation\_Away -> Team\_ID\_Away, Team\_Name\_Away, Team\_Nickname\_Away,

Team\_City\_Name\_Away, Visitor\_Team\_ID

Team\_Abbreviation\_Home, Team\_Abbreviation\_Away -> Matchup\_Home, Matchup\_Away

Pts\_Home, Pts\_Away -> Plus\_Minus\_Home, Plus\_Minus\_Away,

Season\_ID -> Season

Game\_Date -> Game\_Date\_EST, Game\_Date\_Day

WL\_Home -> WL\_Away}

Delete Team\_ID\_Home, Team\_Name\_Home,, Team\_Nickname\_Home,

Team\_City\_Name\_Home, Home\_Team\_ID

Delete Team\_ID\_Away, Team\_Name\_Away, Team\_Nickname\_Away, Team\_Nickname\_Away,

Team\_City\_Name\_Away, Visitor\_Team\_ID

Delete Matchup\_Home, Matchup\_Away

Delete Plus\_Minus\_Home, Plus\_Minus\_Away

Delete Season

Delete Pts\_Home\_y, Team\_Wins\_Losses\_Home, Team\_Wins\_Losses\_Away(redundant column)

Delete Game\_Date\_EST ,Game\_Date\_Day

Delete WL\_Away

Delete Game\_Status\_ID

Delete GameCode (redundant column)

Delete Live\_Period, Live\_Period\_Time\_BCAST, WH Status, Home\_Team\_Wins,  
Home\_Team\_Losses,Video\_Available\_Flag int(8),Hustle\_Status,Historical\_Status,  
PT\_AVAILABLE, PT\_XYZ\_AVAIABLE