**Domain Description**

“National Hoop Entertainment” is a men’s national basketball league that contains many teams associated with many players to entertain American citizens. There will be five teams in the league. Each team in the league must have a unique team name, a state/city of where the teams’ arena is located, total wins/losses, and the CEO’s Id presented. There can be multiple teams located in the same State of the U.S. but need to have a different/unique city within the State. Each team must have a CEO or owner, as for a CEO can only own one team. The CEO will present information such as a unique ID, mandatory full name, address, mandatory/unique email address, and age. There will be athlete nominations for season rewards. There will be nominees for players from each team (if players meet qualifications) based on the following requirements/rewards(except coach award); The rewards contain MVP (based on the players with an average FG% above 70%, PPG above 20, TO per game lower than 3, and APG above 7) to display players with efficient scoring and playing attentions of assisting other teammates to score consistently. There is the reward scoring champion (based on the players with an average PPG above 24 in the season and TO per game lower than 3). Due to the yearly draft being on the 28th of June, there is rookie of the year reward (based on 1st year players-drafted June/28th 2020, that average PPG above 15 and have an FG% higher than 62%). There is defensive player of the year (based on players of a SPG above 3 in the season). There will be the Big Man of the year reward (based on players with an RPG higher than 10); and coach of the year (based on viewing the top coaches with teams with the best records of wins) which will present the coach id, name, the coaches’ team name, and the team’s wins and losses. There will be multiple players for each team that enforces players (teammates) to play for one team/coach, but for a team/coach to have many players. Players on a team are allowed to have a total of 5 to 7 players. A player will also have their unique player ID, must have a full name, a draft date, age that is older than 17years old, averages of performance stats for the season(PPG, APG,RPG,SPG,FG%, TO), their position (Have to be positions of PG, SG, SF, PF, C), their status must being a starter or nonstarter, height , and coach they play for on the roster. There will be five arenas where games will be played. Each arena has its own unique id, must have a unique name, address, seating capacity, and a team that the players have for their home games. A team is able to play in many arenas, as an Arena can have multiple teams perform; up to two teams per game. Due to this, separate information of Team Access will show each team’s access to the different 5 arenas. There will be a team name/unique Arena’s ID/ Arena’s name to identify team access for each team. There will be multiple games constructed in multiple arenas. The National Hoop Entertainment constructs a total of 20 games players compete in. Games will have their own Id, two teams that versus each other(Home team/away team), the total amount of points from the home team and the total amount of points from the away team, the arena’s Id and name of Arena the game is played in, and date of game. The cause of many arenas being able to construct many games allows there to be a game location with the unique Arena’s ID/Arena name/game ID to identify the location of games, and the game’s date. Due to a game being played by many players and players playing many games, players’ stats for each game will be included. There will be one coach that coaches many players, that has personal information as of a unique coaching id, full name, age, address, unique/needed email address, and which team the coach is coaching for. Every coach, player will have mandatory-yearly salaries presented. Every coach, player will have a mandatory expiration date for their contract (years left before contract expires and must have an email with google (gmail). A team can have access in more arenas (5 arenas) besides their home court to play a game, as for an arena can have multiple teams (up to two teams per game) to construct a game. Each arena will have four games constructed during the season, while games for each team will be played in 5 different arenas. This application domain is able to represent a basketball league & its information.

**Report requirements:**

**Seasonal rewards:**

Gather nominees for the league rewards from each team based on top performance. Rewards such as mvp, rookie of the year, defensive player of the year, coach of the year, scoring champion, and big man of the year. Each reward should be pulled nominee should be presented with information such as the players id, players name, position, the stat(s) that qualifies the athlete as a nominee (ex. For mvp nominees, the stats “FG%, PPG , APG, averaged turn overs” will only be presented), team name, team’s city/state. These nominees for each reward should be ordered by the player (from highest to lowest) with the first stat players must qualify for in the process of being nominated for a reward. (Ex. “FG%” would be the factor to order players from highest to lowest FG% in mvp nominees).

**Viewing players, coaches’ contracts:**

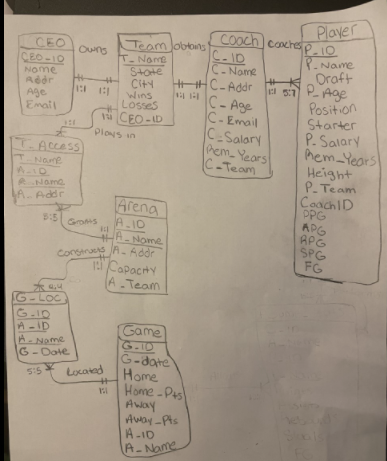
Viewing which players’ contracts will end the following year/season to create a free agency list for coaches (from other teams) to look at and possibly contact one another discussing player trades. Although coaches do not have the authority to make trades, they will be able to contact their boss/CEO of the team to discuss movements regarding free agency so that the CEO can make official decisions. Information should present the player’s id, name, current salary, position, height, the Coaches Id, Coach name, and Coaches email address. Also, be able to view when coaches’ contracts expire to present to CEOs on whether they want to keep/or release the team’s coaches/staff members. This information should present coach’s id, name, salary, email address, team name, team wins and losses.

**View top rival games:**

Being able to view close games in multiple arenas between two teams in the season to predict next season’s great matchups. The total points difference between the two teams cannot be higher than 3 to be considered a rival match. This report will include the game’s id, arena’s id/name, date of rivalry game played, the home team, the away team, and the arena’s capacity.

**Conceptual Model:**

**ERD:**



**National Hoop Entertainment**

**Data Dictionary:**

***Entities***

**CEO**

A CEO is the owner of a team in the league that has the responsibility of managing the team’s overall operations and functionalities such as hiring, firing, financials, etc. A CEO is only able to own one team with a CEO ID equivalent to the CEO’s ID.

CEO has the following attributes:

Name: CEO\_ID

Purpose: Uniquely identifies a CEO of a team

Type: String of 2 characters

Restrictions: Format of “CCC5”

Name: Name

Purpose: Presents the CEO’s full name

Type: String of 25 characters

Restrictions: Required.

Name: Address

Purpose: Present street address of where CEO lives

Type: String of 35 characters

Restrictions: Format of “12 Example street”

Name: Age

Purpose: Provide the age of the CEO

Type: Number of 2 digits

Restriction: Format of “33”

Name: Email

Purpose: Provide the CEO’s email address for contacting

Type: String of 30 characters

Restriction: Required. End with a Gmail

**Team**

A team is a group of players and of one coach owned by a CEO that has two operations. A team is able to obtain a coach and able to have access to an arena with the same team name. A team is needed to play games in these multiple arenas in the league.

Team has following attributes:

Name: T\_Name

Purpose: Uniquely identifies a team in the league

Type: String of 12 characters

Restrictions: Required

Name: State

Purpose: The national state a team is located in for home games.

Type: String of 2 characters

Restrictions: Format of “XX”

Name: City

Purpose: Reveal a unique city a team is located in for home games.

Type: String of 13 characters

Restrictions: Required

Name: Wins

Purpose: Shows total amount of games a team has won in the season.

Type: Number of 2 integers

Restrictions: Required and in format of “00”

Name: Losses

Purpose: Shows total amount of games a team has lost in the season.

Type: Number of 2 integers

Restrictions: Required and in format of “00”

Name: CEO\_ID

Purpose: Uniquely identifies a CEO of a team

Type: String of 2 characters

Restrictions: Format of “CCC5”

**Coach**

A coach is an employee that works for a team and its owner. A coach has the responsibility to coach multiple players in which the players work for the same team and obtain the Coaches ID. Coaches must also view free agency lists and discuss the team’s plans with the CEO.

Coach has following attributes:

Name: C\_ID

Purpose: Uniquely identify a coach

Type: String of 2 characters

Restrictions: Format of “C7”

Name: C\_Name

Purpose: Presents the Coach’s full name.

Type: String of 25 characters

Restrictions: Required

Name: C\_Addr

Purpose: Present street address of where a Coach lives

Type: String of 35 characters

Restrictions: Format of “12 Example street”

Name: C\_Age

Purpose: Provide the age of a Coach.

Type: Number of 2 digits

Restrictions: Format of “33”

Name: C\_Email

Purpose: Provide the Coach’s email address for contacting

Type: String of 30 characters

Restrictions: Required. Gmail

Name: C\_Salary

Purpose: Reveal the Coach’s annual salary

Type: String of 4 characters

Restrictions: Required. Format of “100k”.

Name: Rem\_Years

Purpose: Reveals the years/seasons that remain until a Coach’s contract expires

Type: Number of 1 digit

Restrictions: Required

Name: C\_Team

Purpose: Uniquely identifies a team in the league

Type: String of 12

Restrictions: Required

**Player**

A player is an athlete that plays for a team in the league and is coached by a coach employed on the same team. Player’s responsibility is to gain wins for the team and put off stats during performances.

Player has following attributes:

Name: P\_ID

Purpose: Uniquely identify a player

Type: String of 3 characters max

Restriction: Format of “P00”

Name: P\_Name

Purpose: Show a player’s full name

Type: String of 25 characters

Restrictions: Required

Name: Draft

Purpose: Reveal the date of when a player got drafted into the league.

Type: String of 8 characters

Restrictions: Format of “XX-XX-XX”

Name: P\_Age

Purpose: Show age of a player

Type: Number of 2 digits

Restrictions: Format of “00”

Name: Position

Purpose: Reveal a player’s position in a roster

Type: String of 2 characters

Restrictions: Must be either PG, SG, SF, PF, C

Name: Starter

Purpose: Present if a player is a starter or not

Type: String of 13 characters

Restrictions: Must be either Starter or Non-Starter

Name: P\_Salary

Purpose: Show the player’s annual salary

Type: String of 4 characters

Restrictions: Required. Format of “100k”

Name: Rem\_Years

Purpose: Reveal the amount of years left before a player contract expires

Type: Number of 1 digit

Restrictions: Required

Name: Height

Purpose: Reveal the player’s height in feet-inches

Type: String of 4 characters max

Restrictions: Format of “5-10””

Name: P\_Team

Purpose: Identifies a team in the league that a player performs for

Type: String of 12

Restrictions: Required

Name: CoachID

Purpose: Identify a coach

Type: String of 2 characters

Restrictions: Format of “C7”

Name: PPG

Purpose: Shows a player’s average points per game in the season

Type: Decimal of 2 digits to the left and one digit to the right

Restrictions: Required. Format of “20.0”

Name: APG

Purpose: Shows a player’s average assists per game in the season

Type: Decimal of 2 digits to the left and one digit to the right

Restrictions: Required. Format of “10.0”

Name: RPG

Purpose: Shows a player’s average rebounds per game in the season

Type: Decimal of 2 digits to the left and one digit to the right

Restrictions: Required. Format of “10.0”

Name: SPG

Purpose: Shows a player’s average steals per game in the season

Type: Decimal of 2 digits to the left and one digit to the right

Restrictions: Required. Format of “05.0”

Name: FG

Purpose: Shows a player’s average field goal percentage from the entire season

Type: Number of 2 digits

Restrictions: Required. Format of “00”

Name: T\_O

Purpose: Reveal turn overs a player averaged in the season

Type: Number of 1 digit

Restrictions: Required.

**Arena**

An arena is a building/stadium that allows an audience of fans to sit and enjoy games played by the league’s athletes/players. An arena has the responsibility of granting access to teams that obtain the arena’s id/name and has the responsibility of constructing games that are in the arenas to put on entertainment for the audience.

Arena has following attributes:

Name: A\_ID

Purpose: Uniquely identifies an arena a game is located in

Type: String of 2 characters

Restrictions: Required. Format of “A1”

Name: A\_Name

Purpose: Uniquely identifies the name of an arena a game is constructed in

Type: String of 25 characters

Restrictions: Required

Name: A\_Addr

Purpose: Reveal the street address of an arena

Type: String of 35 characters

Restrictions: Format of “12 Example street”

Name: Capacity

Purpose: Show maximum number of seats allowed in an arena for an audience

Type: Number of 6 digits

Restrictions: Format of “000000”

Name: A\_Team

Purpose: Identify a team’s name that an arena has its home games in

Type: String of 12 characters

Restrictions: Required

**Game**

A game is a performance from two teams that go against each other to compete for wins. A game can be located in arenas that contain the arena’s id/name and has the responsibility to create competition between two teams playing against each other.

Game has following attributes:

Name: G\_ID

Purpose: Uniquely identifies a game constructed in the league

Type: String of 3 characters

Restrictions: Required. Format of “G12”

Name: G\_date

Purpose: Reveals the month, day, and year a game is constructed to play

Type: String of 8 characters

Restrictions: Format of “XX-XX-XX”

Name: Home

Purpose: Revel a team that is playing a game in their home arena

Type: String of 12 characters

Restrictions: Required

Name: Away

Purpose: Reveal the team that is not playing a game in their home arena

Type: String of 12 characters

Restrictions: Required

Name: Home\_Pts

Purpose: Show home team’s total points in a game

Type: Number of 3 digits

Restrictions: Required

Name: Away\_Pts

Purpose: Show away team’s total points in a game

Type: Number of 3 digits

Restrictions: Required

Name: A\_ID

Purpose: Identifies an arena a game is located in

Type: String of 2 characters

Restrictions: Required. Format of “A1”

Name: A\_Name

Purpose: Identifies the name of an arena a game is constructed in

Type: String of 25 characters

Restrictions: Required

**G\_Loc**

A game location is constructed with multiple games that are located in multiple arenas through-out the season; presenting the different locations of games played.

G\_Loc has the following attributes:

Name: A\_ID

Purpose: Uniquely identify an arena that constructs a game by the arena’s id

Type: String of 2 characters

Restrictions: Required. Format of “A1”

Name: A\_Name

Purpose: Uniquely identify an arena that constructs a game by the arena’s name

Type: String of 25 characters

Restrictions: Required

Name: G\_ID

Purpose: Uniquely identifies a game located in an arena by its id

Type: String of 3 character

Restrictions: Required. Format of “X00”

Name: D\_date

Purpose: Reveals the date a game is played in an arena

Type: String of 8 characters

Restrictions: Format of “XX-XX-XX”

Name: Capacity

Purpose: Show maximum number of seats allowed in an arena for an audience

Type: Number of 6 digits

Restrictions: Format of “000000”

**T\_Access**

The team access is the total access teams are allowed to enter into certain arena’s in the league. Teams can enter any arena obtaining the arena’s id/name.

T\_Access has the following attributes:

Name: T\_Name

Purpose: Uniquely identifies a team having access to an arena

Type: String of 12 characters

Restrictions: Required

Name: A\_ID

Purpose: Uniquely identifies an arena by arena id that gives access to a team

Type: String of 2 characters

Restrictions: Required. Format of “X0”

Name: A\_Name

Purpose: Uniquely identifies an arena by arena name that gives access to a team

Type: String of 25 characters

Restrictions:

Name: A\_Addr

Purpose: Reveal the street address that matches the arena’s id/name

Type:

Restriction:

***Relationships:***

**Owns**

A CEO can own only one team in the National Hoop Entertainment. A team can be owned by only one CEO.

**Obtains**

A team obtains one coach to help assist the team’s performance in games. A coach is only able to assist one team.

**Coaches**

A coach in the league coaches’ multiple players within the same team. Players are only coached by one coach.

**Plays in**

A team plays in many arenas from the league, besides their own to compete.

**Grants**

An arena grants access to multiple teams in the league to perform against each other.

**Constructs**

An arena constructs many games in the league and allows a place for players to compete against each other.

**Located**

A game of two teams competing against each other is located in multiple arenas by the league.

**Designing the database – Logical model:**

*CEO* (CEO\_ID, Name, Addr, Age, Email)

Primary Key: CEO\_ID

*Team* (T\_Name, State, City, Wins, Losses, CEO\_ID)

Primary Key: T\_Name

Foreign Key: CEO\_ID

*Coach* (C\_ID, C\_Name, C\_Addr, C\_Age, C\_Email, C\_Salary, Rem\_Years, C\_Team)

Primary Key: C\_ID

Foreign Key: C\_Team

*Player* (P\_ID, P\_Name, Draft, P\_Age, Position, Starter, P\_Salary, Rem\_Years, Height, P\_Team, CoachID, PPG, APG, RPG, SPG, FG, T\_O)

Primary Key: P\_ID

Foreign Key: CoachID, P\_Team

*Arena* (A\_ID, A\_Name, A\_Addr, Capacity, A\_Team)

Primary Key: A\_ID, A\_Name

Foreign Key: A\_Team

*Game* (G\_ID, G\_date, Home, Away, Home\_Pts, Away\_Pts, A\_ID, A\_Name)

Primary Key: G\_ID

Foreign Key: A\_ID, A\_Name

*G\_Loc* (G\_ID, A\_ID, A\_Name, G\_date, Capacity)

Primary Key: G\_ID, A\_ID, A\_Name

Foreign Key: A\_ID, A\_Name, G\_ID

*T\_Access* (T\_Name, A\_ID, A\_Name, A\_Addr)

Primary Key: T\_Name, A\_ID, A\_Name

Foreign Key: T\_Name, A\_ID, A\_Name

**Data Definition Statements:**

Create table CEO (

CEO\_ID varchar2 (4) Not Null,

Name varchar2(25) Not Null,

Addr varchar2(35),

Age number (2),

Email varchar2(30) Not Null,

Primary key (CEO\_ID),

Unique (Email));

Create table Team (

T\_Name varchar2 (12) Not Null,

State char (2),

City varchar2(13),

Wins number (2) Not Null,

Losses number (2) Not Null,

CEO\_ID varchar2 (4),

Primary key (T\_Name),

Foreign key (CEO\_ID) References CEO (CEO\_ID),

Unique (City));

Create table Coach (

C\_ID char (2) Not Null,

C\_Name varchar2(25) Not Null,

C\_Addr varchar2(35),

C\_Age number (2),

C\_Email varchar2(30) Not Null,

C\_Salary varchar2(4) Not Null,

Rem\_Years number (1) Not Null,

C\_Team varchar2(12) Not Null,

Primary key (C\_ID),

Foreign key (C\_Team) References Team(T\_Name),

Unique (C\_Email));

Create table Player (

P\_ID varchar2 (3) Not Null,

P\_Name varchar2(25) Not Null,

Draft varchar2 (8) Not Null,

P\_Age number (2),

Position char (2) Not Null,

Starter varchar2(13),

P\_Salary varchar2 (4) Not Null,

Rem\_Years number (1) Not Null,

Height varchar2(4),

P\_Team varchar2(12) Not Null,

CoachID char (2) Not Null,

PPG number (2) Not Null,

APG number (2) Not Null,

RPG number (2) Not Null,

SPG number (2,) Not Null,

FG number (2) Not Null,

T\_O number(1) Not Null,

Primary key (P\_ID),

Foreign key (CoachID) References Coach (C\_ID),

Foreign key (P\_Team) References Team (T\_Name),

Check (Position IN (‘PG’, ‘SG’, ‘SF’, ‘PF’, ‘C’)),

Check (Starter IN (‘Starter’, ‘Non-Starter’)));

Create table Arena (

A\_ID char (2) Not Null,

A\_Name varchar2(25) Not null,

A\_Addr varchar2(35),

Capacity number (6),

A\_Team varchar2(12) Not Null,

Primary key (A\_ID, A\_Name),

Foreign key (A\_Team) References Team(T\_Name),

Unique (A\_Addr));

Create table T\_Access (

T\_Name varchar2(12) Not Null,

A\_ID char(2) Not Null,

A\_Name varchar2(25) Not Null,

A\_Addr varchar2(35),

Primary key (T\_Name, A\_ID, A\_Name),

Foreign key (T\_Name) References Team (T\_Name),

Foreign key (A\_ID, A\_Name) References Arena (A\_ID, A\_Name));

Create table Game (

G\_ID varchar2(3) Not Null,

G\_date varchar2(8),

Home varchar2(12) Not Null,

Home\_Pts number(3) Not Null,

Away varchar2(12) Not Null,

Away\_Pts number(3) Not Null,

A\_ID char(2) Not Null,

A\_Name varchar2(25) Not Null,

Primary key (G\_ID),

Foreign key (A\_ID, A\_Name) References Arena (A\_ID, A\_Name));

Create table G\_Loc (

G\_ID varchar2(3) Not Null,

A\_ID char (2) Not Null,

A\_Name varchar2 (25) Not Null,

G\_date varchar(8),

Capacity number(6),

Primary key(G\_ID,A\_ID, A\_Name),

Foreign key (A\_ID, A\_Name) References Arena (A\_ID, A\_Name),

Foreign key (G\_ID) References Game (G\_ID));

**Statements to populate tables:**

**CEO-**

Insert into CEO

Values (‘CEO1’, ‘Bret Zane’, ‘120 Park Ave’, 47, ‘BZane1@gmail.com’,);

Insert into CEO

Values (‘CEO2’, ‘John Wilkins’, ‘4 Clover St’, 34, ‘WilkinsJ3@gmail.com’);

Insert into CEO

Values (‘CEO3’, ‘Ryan Deed’, ‘291 Reeker St’, 42, ‘RyanDeed2@gmail.com’);

Insert into CEO

Values (‘CEO4’, ‘Tyliss Williams’, ’47 Balivore Ave’, 29, ‘TyWilliams35@gmail.com’);

Insert into CEO

Values (‘CEO5’, ‘Daren Collins’, ’28 Cleasure St’, 36, ‘CollinsD2@gmail.com’);

**Team-**

Insert into Team

Values (‘Sharks’, ‘FL’, ‘Miami’, 5, 3, ‘CEO1’);

Insert into Team

Values (‘Eagles’, ‘NY’, ‘Bronx’, 3, 5, ‘CEO4’);

Insert into Team

Values (‘Stars’, ‘LA’, ‘Calabasas’, 2, 6, ‘CEO2’);

Insert into Team

Values (‘Bears’, ‘CT’, ‘New Haven’, 4, 4, ‘CEO3’);

Insert into Team

Values (‘Warriors’, ‘CT’, ‘Hartford’, 6, 2, ‘CEO5’);

**Coach-**

Insert into Coach

Values ('C1', 'Doc Priller', '23 Jordan Ave', 49, 'DocP5@gmail.com', '150k', 0, 'Eagles');

Insert into Coach

Values ('C2', 'Sean Baker', '912 Nent St' , 33, 'SeanBaker21@gmail.com', '115k', 3, 'Warriors');

Insert into Coach

Values ('C3', 'Leslie Park', '140 Minner St', 37, 'LesPark30@gmail.com', '130k', 0, 'Stars');

Insert into Coach

Values ('C4', 'Caitlyn Eager', '98 Main St', 28, 'CEager9@gmail.com', '107k', 4, 'Sharks');

Insert into Coach

Values ('C5', 'Dustin Yagent', '77 Boston Ave', 26, 'DustinY20@gmail.com', '100k', 4, 'Bears');

**Player-**

Insert into Player

Values (‘P1’, ‘John Smith’, ‘6-28-20’, 19, ‘PG’, ‘Starter’, ‘175k’, 4, ‘6-3’, ‘Sharks’, ‘C4’, 18, 12, 2, 4, 64, 1);

Insert into Player

Values(‘P2’, ‘Javaun Meed’, ‘6-28-18’, 22, ‘SG’, ‘Starter’, ‘275k’, 2, ‘6-5’, ‘Sharks’, ‘C4’, 19, 8, 3, 3, 80, 2);

Insert into Player

Values(‘P3’, ‘Malachi King’, ‘6-28-15’, 26, ‘SF’, ‘Starter’, ‘500k’, 2, ‘6-9’, ‘Sharks’, ‘C4’, 31, 3, 6, 2, 80, 1);

Insert into Player

Values(‘P4’, ‘Ty Woods’, ‘6-28-17’, 22, ‘PF’, ‘Starter’, ‘300k’, 0, ‘6-11’, ‘Sharks’, ‘C4’, 17, 2, 10, 1, 87, 3);

Insert into Player

Values(‘P5’, ‘Jason Brook’, ‘6-28-19’, 20, ‘C’, ‘Starter’, ‘242k’, 2, ‘7-0’, ‘Sharks’, ‘C4’, 5, 1, 11, 1, 62, 1);

Insert into Player

Values(‘P6’, ‘Bill Williams’, ‘6-28-14’, 28, ‘SF’, ‘Non-Starter’, ‘110k’, 2, ‘6-7’, ‘Sharks’, ‘C4’, 3, 1, 2, 0, 35, 5);

Insert into Player

Values(‘P7’, ‘Greg Pront’, ‘6-28-17’, 21, ‘PG’, ‘Starter’, ‘200k’, 1, ‘6-1’, ‘Eagles’, ‘C1’, 19, 9, 2, 3, 68, 2);

Insert into Player

Values(‘P8’, ‘John Smith’, ‘6-28-16’, 22, ‘SG’, ‘Starter’, ‘380k’, 2, ‘6-4’, ‘Eagles’, ‘C1’, 27, 4, 2, 2, 72, 2);

Insert into Player

Values(‘P9’, ‘Zach Filler’, ‘6-28-20’, 18, ‘SF’, ‘Starter’, ‘115k’, 4, ‘6-8’, ‘Eagles’, ‘C1’, 17, 3, 5, 1, 69, 3);

Insert into Player

Values(‘P10’, ‘Andre Montey’, ‘6-28-13’, 28, ‘PF’, ‘Starter’, ‘175k’, 2, ‘6-9’, ‘Eagles’, ‘C1’, 13, 2, 7, 1, 72, 4);

Insert into Player

Values(‘P11’, ‘Brian Conners’, ‘6-28-12’, 30, ‘C’, ‘Starter’, ‘305k’, 0, ‘6’-10’, ‘Eagles’, ‘C1’, 20, 1, 12, 0, 73, 1);

Insert into Player

Values(‘P12’, ‘Evan Monny’, ‘6-28-10’, 29, ‘PG’, ‘Starter’, ‘400k’, 1, ‘6-5’, ‘Stars’, ‘C3’, 22, 11, 2, 5, 78, 2);

Insert into Player

Values(‘P13’, ‘Bryson Curry’, ‘6-28-12’, 26, ‘SG’, ‘Starter’, ‘320k’, 2, ‘6-6’, ‘Stars’, ‘C3’, 23, 3, 3, 2, 74, 1);

Insert into Player

Values(‘P14’, ‘Tom Heed’, ‘6-28-14’, 25, ‘SF’, ‘Starter’, ‘274k’, 0, ‘6-9’, ‘Stars’, ‘C3’, 16, 3, 5, 2, 69, 1);

Insert into Player

Values(‘P15’, ‘Williams Hanks’, ‘6-28-20’, 20, ‘PF’, ‘Starter, ‘180k’, 4, ‘6-9’, ‘Stars’, ‘C3’, 15, 2, 9, 0 , 67, 4);

Insert into Player

Values(‘P16’, ‘Jerry Harden’, ‘6-28-20’, 20, ‘C’, ‘Starter’, ‘412k’, 2, ‘6-11’, ‘Stars’, ‘C3’, 13, 1, 13, 1, 61, 2);

Insert into Player

Values(‘P17’, ‘Brendan Ren’, ‘6-28-17’, 23, ‘PG’, ‘Starter’, ‘200k’, 0, ‘6-2’, ‘Bears’, ‘C5’, 19, 12, 1, 4, 73, 1);

Insert into Player

Values(‘P18’, ‘Jacob Riller’, ‘6-28-20’, 19, ‘SG’, ‘Starter’, ‘170k’, 4, ‘6-7’, ‘Bears’, ‘C5’, 17, 3, 3, 2,67, 2);

Insert into Player

Values(‘P19’, ‘Trell James’, ‘6-28-16’, 22, ‘SF’, ‘Starter’, ‘475k’, 2, ‘6-10’, ‘Bears’, ‘C5’, 19, 3, 5, 2, 73, 1);

Insert into Player

Values(‘P20’, ‘Glen James’, ‘6-28-05’, 36, ‘PF’, ‘Starter’, ‘130k’, 0, ‘6-9’, ‘Bears’, ‘C5’, 12, 2, 7, 0, 69, 1);

Insert into Player

Values(‘P21’, ‘Jason Brook’, ‘6-28-13, 25, ‘C’, ‘Starter’, ‘500k’, 1, ‘7-1’, ‘Bears’, ‘C5’, 16, 1, 12, 0, 67, 2);

Insert into Player

Values(‘P22’, ‘Ken Lin’, ‘6-28-20’, 20, ‘PF’, ‘Non-Starter’, ‘163k’, 3, ‘6-11’, ‘Bears’, ‘C5’, 4, 0, 1, 0, 53, 4);

Insert into Player

Values(‘P23’, ‘Ron Turner’, ‘6-28-17’, ‘23’, ‘PG’, ‘Starter’, ‘525k’, 0, ‘6-4’, ‘Warriors’, ‘C2’, 19, 14, 5, 4, 76, 1);

Insert into Player

Values(‘P24’, ‘Nate McDonald’, ‘6-28-15’, 25, ‘SG’, ‘Starter’, ‘490k’, 1, ‘6-8’, ‘Warriors’, ‘C2’, 25, 5, 3, 3, 82, 1);

Insert into Player

Values(‘P25’, ‘James Durant’, ‘6-28-15’, 26, ‘SF’, ‘Starter’, ‘550k’, 3, ‘6-8’, ‘Warriors’, ‘C2’, 37, 9, 8, 1, 82, 2);

Insert into Player

Values(‘P26’, ‘Daren Wright’, ‘6-28-18’, 22, ‘PF’, ‘Starter’, ‘325k’, 2, ‘6-10’, ‘Warriors’, ‘C2’, 10, 1, 8, 0, 74, 1);

Insert into Player

Values(‘P27’, ‘Sephen Black’, ‘6-28-20’, 19, ‘C’, ‘Starter’, ‘200k’, 4, ‘6-11’, ‘Warriors’, ‘C2’, 6, 1, 9, 0, 74, 3);

Insert into Player

Values(‘P28’, ‘Von Creasere’, ‘6-28-20’, 19, ‘PG’, Non-Starter’, ‘140k’, 2, ‘6-2’, ‘Warriors’, ‘C2’, 2, 1, 1, 0, 51, 1);

Insert into Player

Values(‘P29’, ‘Dillan Mullin’, ‘6-28-07’, 32, ‘C’, ‘Non-Starter’, ‘105k’, 1, ‘6-10’, ‘Warriors’, ‘C2’, 1, 1, 0, 0, 48, 6);

**Arena-**

Insert into Arena

Values (‘A1’, ‘Ocean Center’, ’29 Route Ave’, 40000, ‘Shark’);

Insert in Arena

Values (‘A2’, ‘Soaring Stadium’, ’57 Haklin St’, 30000, ‘Eagles’);

Insert in Arena

Values (‘A3’, ‘Hoop Center’, ’73 Cannon Ave’, 55000, ‘Stars’);

Insert in Arena

Values (‘A4’, ‘Forest Center’, ‘55 Kings St’, 42000, ‘Bears’);

Insert in Arena

Values (‘A5’, ‘Battle Arena’, ‘102 Sheen St’, 38000, ‘Warriors’);

**T\_Access-**

Insert into T\_Access

Values (‘Sharks’, ‘A1’, ‘Ocean Center’, ’29 Route Ave’);

Insert into T\_Access

Values (‘Sharks’, ‘A2’, ‘Soaring Stadium’, ’57 Haklin St’);

Insert into T\_Access

Values (‘Sharks’, ‘A3’, ‘Hoop Center’, ’73 Cannon Ave’);

Insert into T\_Access

Values (‘Sharks’, ‘A4’, ‘Forest Center’, ’55 Kings St’);

Insert into T\_Access

Values (‘Sharks’, ‘A5’, ‘Battle Arena’, ‘102 Sheen St’);

Insert into T\_Access

Values (‘Eagles’, ‘A1’, ‘Ocean Center’, ’29 Route Ave’);

Insert into T\_Access

Values (‘Eagles’, ‘A2’, ‘Soaring Stadium’, ’57 Haklin St’);

Insert into T\_Access

Values (‘Eagles’, ‘A3’, ‘Hoop Center’, ’73 Cannon Ave’);

Insert into T\_Access

Values (‘Eagles’, ‘A4’, ‘Forest Center’, ’55 Kings St’);

Insert into T\_Access

Values (‘Eagles’, ‘A5’, ‘Battle Arena’, ‘102 Sheen St’);

Insert into T\_Access

Values (‘Stars’, ‘A1’, ‘Ocean Center’, ’29 Route Ave’);

Insert into T\_Access

Values (‘Stars’, ‘A2’, ‘Soaring Stadium’, ’57 Haklin St’);

Insert into T\_Access

Values (‘Stars’, ‘A3’, ‘Hoop Center’, ’73 Cannon Ave’);

Insert into T\_Access

Values (‘Stars’, ‘A4’, ‘Forest Center’, ’55 Kings St’);

Insert into T\_Access

Values (‘Stars’, ‘A5’, ‘Battle Arena’, ‘102 Sheen St’);

Insert into T\_Access

Values (‘Bears’, ‘A1’, ‘Ocean Center’, ’29 Route Ave’);

Insert into T\_Access

Values (‘Bears’, ‘A2’, ‘Soaring Stadium’, ’57 Haklin St’);

Insert into T\_Access

Values (‘Bears’, ‘A3’, ‘Hoop Center’, ’73 Cannon Ave’);

Insert into T\_Access

Values (‘Bears’, ‘A4’, ‘Forest Center’, ’55 Kings St’);

Insert into T\_Access

Values (‘Bears’, ‘A5’, ‘Battle Arena’, ‘102 Sheen St’);

Insert into T\_Access

Values (‘Warriors’, ‘A1’, ‘Ocean Center’, ’29 Route Ave’);

Insert into T\_Access

Values (‘Warriors’, ‘A2’, ‘Soaring Stadium’, ’57 Haklin St’);

Insert into T\_Access

Values (‘Warriors’, ‘A3’, ‘Hoop Center’, ’73 Cannon Ave’);

Insert into T\_Access

Values (‘Warriors’, ‘A4’, ‘Forest Center’, ’55 Kings St’);

Insert into T\_Access

Values (‘Warriors’, ‘A5’, ‘Battle Arena’, ‘102 Sheen St’);

**Games -**

Insert into Game

Values (‘G1’, ‘9-1-20’, ‘Sharks’, 91, ‘Eagles’, 88, ‘A1’, ‘Ocean Center’);

Insert into Game

Values(‘G2’, ‘9-20-20’, ‘Sharks’, 101, ‘Stars’, 79, ‘A1’, ‘Ocean Center’);

Insert into Game

Values(‘G3’, ’10-1-20’, ‘Eagles’, 98, ‘Sharks’, 95, ‘A2’, ‘Soaring Stadium’);

Insert into Game

Values(‘G4’, ‘9-1-20’, ‘Bears’, 100, ‘Warriors’, 98, ‘A4’, ‘Forest Center’);

Insert into Game

Values(‘G5’, ‘9-20-20’, ‘Eagles’, 92, ‘Warriors’, 112, ‘A2’, ‘Soaring Stadium’);

Insert into Game

Values(‘G6’, ‘11-1-20’, ‘Stars’, 83, ‘Eagles’, 102, ‘A3’, ‘Hoop Center’);

Insert into Game

Values(‘G7’, ’10-20-20’, ‘Bears’, 87, ‘Sharks’, 98, ‘A4’, ‘Forest Center’);

Insert into Game

Values(‘G8’, ’10-20-20’, ‘Warriors’, 95, ‘Star’, 90, ‘A5’, ‘Battle Arena’);

Insert into Game

Values(‘G9’, ’10-1-20’, ‘Warriors’, 87, ‘Bears’, 70, ‘A5’, ‘Battle Arena’);

Insert into Game

Values(‘G10’, ’11-20-20’, ‘Eagles’, 71, ‘Bears’, 83, ‘A2’, ‘Soaring Stadium’);

Insert into Game

Values(‘G11’, ’12-1-20’, ‘Stars’, 90, ‘Sharks’, 82, ‘A3’, ‘Hoop Center’);

Insert into Game

Values(‘G12’, ’12-20-20’, ‘Eagles’, 93, ‘Stars’, 94, ‘A2’, ‘Soaring Stadium’);

Insert into Game

Values(‘G13’, ‘1-1-20’, ‘Warriors’, 101, ‘Sharks’, 90, ‘A5’, ‘Battle Arena’);

Insert into Game

Values(‘G14’, ‘1-20-20’, ‘Sharks’, 99, ‘Warriors’, 97, ‘A1’, ‘Ocean Center’);

Insert into Game

Values(‘G15’, ’11-1-20’, ‘Sharks’, 82, ‘Bears’, 79, ‘A1’, ‘Ocean Center’);

Insert into Game

Values(‘G16’, ‘2-1-20’, ‘Stars’, 94, ‘Warriors’, 95, ‘A3’, ‘Hoop Center’);

Insert into Game

Values(‘G17’, ‘2-20-20’, ‘Stars’, 99, ‘Bears’, 101, ‘A3’, ‘Hoop Center’);

Insert into Game

Values(‘G18’, ‘3-1-20’, ‘Warriors’, 100, ‘Eagles’, 99, ‘A5’, ‘Battle Arena’);

Insert into Game

Values(‘G19’, ‘3-20-20’, ‘Bears’, 81, ‘Eagles’, 90, ‘A4’, ‘Forest Center’);

Insert into Game

Values(‘G20’, ‘1-1-20’, ‘Bears’, 82, ‘Stars’, 78, ‘A4’, ‘Forest Center’);

**G\_Loc**

Insert into G\_Loc

Values (‘G1’, ‘A1’, ‘Ocean Center’, ‘9-1-20’, 40000);

Insert into G\_Loc

Values(‘G2’, ‘A1’, ‘Ocean Center’, ‘9-20-20’, 40000);

Insert into G\_Loc

Values(‘G3’, ‘A2’, ‘Soaring Stadium’, ’10-1-20’, 30000);

Insert into G\_Loc

Values(‘G4’, ‘A4’, ‘Forest Center’, ‘9-1-20’, 42000);

Insert into G\_Loc

Values(‘G5’, ‘A2’, ‘Soaring Stadium’, ‘9-20-20’, 30000);

Insert into G\_Loc

Values(‘G6’, ‘A3’, ‘Hoop Center’, ’11-1-20’, 55000);

Insert into G\_Loc

Values(‘G7’, ‘A4’, ‘Forest Center’, ’10-20-20’, 42000);

Insert into G\_Loc

Values(‘G8’, ‘A5’, ‘Battle Arena’, ’10-20-20’, 38000);

Insert into G\_Loc

Values(‘G9’, ‘A5’, ‘Battle Arena’, ’10-1-20’, 28000);

Insert into G\_Loc

Values(‘G10’, ‘A2’, ‘Soaring Stadium’, ’11-20-20’, 30000);

Insert into G\_Loc

Values(‘G11’, ‘A3’, ‘Hoop Center’, ’12-1-20’, 55000);

Insert into G\_Loc

Values(‘G12’, ‘A2’, ‘Soaring Stadium’, ’12-20-20’, 30000);

Insert into G\_Loc

Values(‘G13’, ‘A5’, ‘Battle Arena’, ‘1-1-20’, 38000);

Insert into G\_Loc

Values(‘G14’, ‘A1’, ‘Ocean Center’, ‘1-20-20, 40000);

Insert into G\_Loc

Values(‘G15’, ‘A1’, ‘Ocean Center’, ’11-1-20’, 40000);

Insert into G\_Loc

Values(‘G16’, ‘A3’, ‘Hoop Center’, ‘2-1-20’, 55000);

Insert into G\_Loc

Values(‘G17’, ‘A3’, ‘Hoop Center’, ‘2-20-20’, 55000);

Insert into G\_Loc

Values(‘G18’, ‘A5’, ‘Battle Arena’, ‘3-1-20’, 38000);

Insert into G\_Loc

Values(‘G19’, ‘A4’, ‘Forest Center’, ‘3-20-20’, 42000);

Insert into G\_Loc

Values(‘G20’, ‘A4’, ‘Forest Center’, ‘11-1-20’, 42000);

**Sample Runs-Required Reports**

**Seasonal Rewards:**

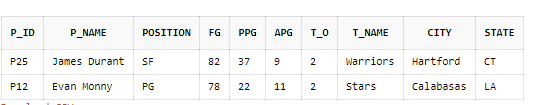
**MVP Nominees:**

Select P\_ID, P\_Name, Position, FG, PPG, APG, T\_O, T\_Name, City, State

From Player join Team on Player.P\_Team = Team.T\_Name

Where (FG > 70) and (PPG > 20) and (APG > 7) and (T\_O < 3)

Order by FG desc;



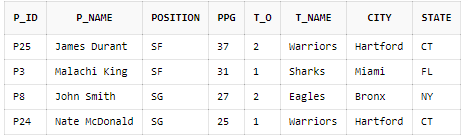
**Scoring Champion Nominees:**

Select P\_ID, P\_Name, Position, PPG, T\_O, T\_Name, City, State

From Player join Team on Player.P\_Team = Team.T\_Name

Where (PPG > 24) and (T\_O < 3)

Order by PPG desc;



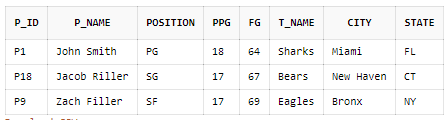
**ROTY Nominees:**

Select P\_ID, P\_Name, Position, PPG, FG, T\_Name, City, State

From Player join Team on Player.P\_Team = Team.T\_Name and Player.Draft = '6-28-20'

Where (PPG > 15) and (FG > 62)

Order by PPG desc;



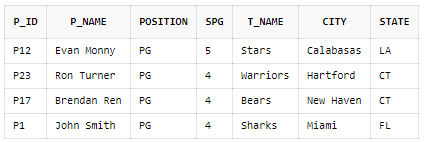
**Defensive Player of the year nominees:**

Select P\_ID, P\_Name, Position, SPG, T\_Name, City, State

From Player join Team on Player.P\_Team = Team.T\_Name

Where (SPG > 3)

Order by SPG desc;



**Big man of the year:**

Select P\_ID, P\_Name, Position, RPG, T\_Name, City, State

From Player join Team on Player.P\_Team = Team.T\_Name

Where (RPG > 10)

Order by RPG desc;



**Coach of the year:**

Select C\_ID, C\_Name, T\_Name, Wins, Losses

From Coach join Team on Coach.C\_Team = Team.T\_name

Order by Wins desc;



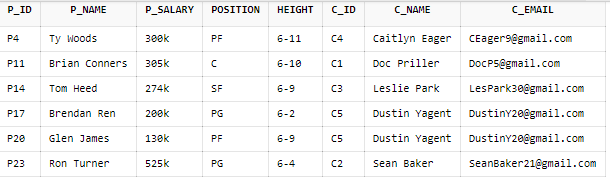
**Viewing players, coaches’ contracts:**

**View Player Contracts for free agency:**

select P\_ID, P\_Name, P\_Salary, Position, Height, C\_ID, C\_Name, C\_Email

From Player join Coach on CoachID = C\_ID

Where Player.Rem\_Years = 0;

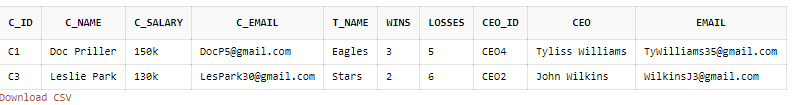


**View Coach Contracts that need to renew/cancel:**

select C\_ID, C\_Name, C\_Salary, C\_Email, T\_Name, Wins, Losses, CEO.CEO\_ID, CEO.Name as CEO, CEO.Email

From Coach join Team on (C\_Team = T\_Name and Coach.Rem\_Years = 0)

Join CEO

On Team.CEO\_ID = CEO.CEO\_ID; 

**View top rival games:**

select G\_Loc.G\_ID, G\_Loc.A\_ID, G\_Loc.A\_Name, G\_Loc.G\_Date, Game.Home, Game.Away, G\_Loc.Capacity

From G\_Loc Join Game on G\_Loc.G\_ID = Game.G\_ID

Where (Home\_Pts > Away\_Pts) And ((Home\_Pts - Away\_Pts) < 4)

Or (Away\_Pts > Home\_Pts) And ((Away\_Pts-Home\_Pts)< 4);

