

SQL commands for creating database and tables

```
CREATE DATABASE IF NOT EXISTS `NBA`;
USE `NBA`;

SET FOREIGN_KEY_CHECKS = 0;

DROP TABLE IF EXISTS `Division`;
DROP TABLE IF EXISTS `Venue`;
DROP TABLE IF EXISTS `NBATeam_BelongsTo`;
DROP TABLE IF EXISTS `NBAPlayer_PlaysFor`;
DROP TABLE IF EXISTS `NBASTaff_WorksFor`;
DROP TABLE IF EXISTS `Sponsor_Endorses`;
DROP TABLE IF EXISTS `NBAGame_Plays_PlayedAt`;
DROP TABLE IF EXISTS `NBAReferee`;
DROP TABLE IF EXISTS `Referees`;

CREATE TABLE `Division` (
  `divisionName` VARCHAR(10),
  PRIMARY KEY (`divisionName`)
);

CREATE TABLE `Venue` (
  `venueName` VARCHAR(30),
  `city` VARCHAR(30),
  `address` VARCHAR(50),
  PRIMARY KEY (`venueName`, `city`)
);

CREATE TABLE `NBATeam_BelongsTo` (
  `abbreviation` CHAR(3),
  `city` VARCHAR(30),
  `teamName` VARCHAR(30),
  `divisionName` VARCHAR(10) NOT NULL,
  PRIMARY KEY (`abbreviation`),
  FOREIGN KEY (`divisionName`) REFERENCES `Division` (`divisionName`)
);

CREATE TABLE `NBAPlayer_PlaysFor` (
  `number` INT,
  `position` CHAR(2),
  `firstName` VARCHAR(30),
  `lastName` VARCHAR(30),
  `height` INT,
  `weight` INT,
  `draftYear` YEAR(4),
  `team` CHAR(3) NOT NULL,
  PRIMARY KEY (`number`, `team`),
  FOREIGN KEY (`team`) REFERENCES `NBATeam_BelongsTo` (`abbreviation`)
  ON DELETE CASCADE
);

CREATE TABLE `NBASTaff_WorksFor` (
```

```

    `firstName` VARCHAR(30),
    `lastName` VARCHAR(30),
    `job` VARCHAR(30),
    `team` CHAR(3) NOT NULL,
    PRIMARY KEY (`firstName`, `lastName`, `team`),
    FOREIGN KEY (`team`) REFERENCES `NBATeam_BelongsTo` (`abbreviation`)
        ON DELETE CASCADE
);

CREATE TABLE `Sponsor_Endorses` (
    `company` VARCHAR(30),
    `team` CHAR(3) NOT NULL,
    PRIMARY KEY (`company`, `team`),
    FOREIGN KEY (`team`) REFERENCES `NBATeam_BelongsTo` (`abbreviation`)
        ON DELETE CASCADE
);

CREATE TABLE `NBAGame_Plays_PlayedAt` (
    `gameDate` DATE,
    `homeScore` INT,
    `awayScore` INT,
    `homeTeam` CHAR(3) NOT NULL,
    `awayTeam` CHAR(3) NOT NULL,
    `venueName` VARCHAR(30) NOT NULL,
    `city` VARCHAR(30) NOT NULL,
    PRIMARY KEY (`gameDate`, `homeTeam`, `awayTeam`),
    FOREIGN KEY (`homeTeam`) REFERENCES `NBATeam_BelongsTo` (`abbreviation`)
        ON DELETE CASCADE,
    FOREIGN KEY (`awayTeam`) REFERENCES `NBATeam_BelongsTo` (`abbreviation`)
        ON DELETE CASCADE,
    FOREIGN KEY (`venueName`, `city`) REFERENCES `Venue` (`venueName`, `city`)
);

CREATE TABLE `NBAReferee` (
    `number` INT,
    `firstName` VARCHAR(30),
    `lastName` VARCHAR(30),
    PRIMARY KEY (`number`)
);

CREATE TABLE `Referees` (
    `refNumber` INT,
    `gameDate` DATE,
    `homeTeam` CHAR(3),
    `awayTeam` CHAR(3),
    PRIMARY KEY (`refNumber`, `gameDate`, `homeTeam`, `awayTeam`),
    FOREIGN KEY (`refNumber`) REFERENCES `NBAReferee` (`number`),
    FOREIGN KEY (`gameDate`, `homeTeam`, `awayTeam`)
        REFERENCES `NBAGame_Plays_PlayedAt` (`gameDate`, `homeTeam`, `awayTeam`)
);

```

SQL commands for inserting data

```
LOAD DATA INFILE '/opt/bitnami/apache2/cpsc304/data/Division.txt'
  INTO TABLE nba.division
  IGNORE 1 LINES;
LOAD DATA INFILE '/opt/bitnami/apache2/cpsc304/data/NBAGame_Plays_PlayedAt.txt'
  INTO TABLE nba.nbagame_plays_playedat
  IGNORE 1 LINES;
LOAD DATA INFILE '/opt/bitnami/apache2/cpsc304/data/NBAPlayer_PlaysFor.txt'
  INTO TABLE nba.nbaplayer_playsfor
  IGNORE 1 LINES;
LOAD DATA INFILE '/opt/bitnami/apache2/cpsc304/data/NBAReferee.txt'
  INTO TABLE nba.nbareferee
  IGNORE 1 LINES;
LOAD DATA INFILE '/opt/bitnami/apache2/cpsc304/data/NBAStaff_WorksFor.txt'
  INTO TABLE nba.nbastaff_worksfor
  IGNORE 1 LINES;
LOAD DATA INFILE '/opt/bitnami/apache2/cpsc304/data/NBATEam_BelongsTo.txt'
  INTO TABLE nba.nbateam_belongsto
  IGNORE 1 LINES;
LOAD DATA INFILE '/opt/bitnami/apache2/cpsc304/data/Referees.txt'
  INTO TABLE nba.referees
  IGNORE 1 LINES;
LOAD DATA INFILE '/opt/bitnami/apache2/cpsc304/data/Sponsor_Endorses.txt'
  INTO TABLE nba.sponsor_endorses
  IGNORE 1 LINES;
LOAD DATA INFILE '/opt/bitnami/apache2/cpsc304/data/Venue.txt'
  INTO TABLE nba.venue
  IGNORE 1 LINES;
```

Proof that data is stored correctly

```
mysql> show tables;
+-----+
| Tables_in_nba |
+-----+
| division      |
| nbagame_plays_playedat |
| nbaplayer_playsfor |
| nbareferee    |
| nbastaff_worksfor |
| nbateam_belongsto |
| referees      |
| sponsor_endorses |
| venue        |
+-----+
9 rows in set (0.00 sec)

mysql> select * from division;
+-----+
| divisionName |
+-----+
| Atlantic    |
| Central     |
| Northwest   |
| Pacific     |
| Southeast   |
| Southwest   |
+-----+
6 rows in set (0.00 sec)
```

```
mysql> select * from nbagame_plays_playedat;
```

gameDate	homeScore	awayScore	homeTeam	awayTeam	venueName	city
2014-04-20	90	85	SAS	DAL	AT&T Center	San Antonio, TX
2014-05-06	116	92	SAS	POR	AT&T Center	San Antonio, TX
2014-05-07	105	122	OKC	LAC	Chesapeake Energy Arena	Oklahoma City, OK
2014-05-10	103	118	POR	SAS	Moda Center	Portland, OR
2014-05-11	104	105	LAC	OKC	Staples Center	Los Angeles, CA

5 rows in set (0.00 sec)

```
mysql> select * from nbaplayer_playsfor;
```

number	position	firstName	lastName	height	weight	draftYear	team
12	C	Steven	Adams	84	255	2013	OKC
12	PF	LaMarcus	Aldridge	83	240	2009	POR
21	PF	Tim	Duncan	83	250	1997	SAS
22	SF	Matt	Barnes	79	226	2012	LAC
41	PF	Dirk	Nowitzki	84	237	1998	DAL

5 rows in set (0.00 sec)

```
mysql> select * from nbareferee;
```

number	firstName	lastName
10	Ron	Garretson
12	Violet	Palmer
13	Monty	McCutchen
15	Bennett	Salvatore
17	Joe	Crawford
27	Dick	Bavetta
28	Zach	Zarba
32	Eddie	Rush
40	Leon	Wood

9 rows in set (0.00 sec)

```
mysql> select * from nbastaff_worksfor;
```

firstName	lastName	job	team
Alvin	Gentry	Assistant Coach	LAC
Gregg	Popovich	Head Coach	SAS
Jay	Triano	Assistant Coach	POR
Rick	Carlisle	Head Coach	DAL
Scott	Brooks	Head Coach	OKC

5 rows in set (0.00 sec)

```
mysql> select * from nbateam_belongsto;
```

abbreviation	city	teamName	divisionName
DAL	Dallas, TX	Mavericks	Southwest
LAC	Los Angeles, CA	Clippers	Pacific
OKC	Oklahoma City, OK	Thunder	Northwest
POR	Portland, OR	Blazers	Northwest
SAS	San Antonio, TX	Spurs	Southwest

5 rows in set (0.00 sec)

```
mysql> select * from referees;
```

refNumber	gameDate	homeTeam	awayTeam
10	2014-04-20	SAS	DAL
40	2014-04-20	SAS	DAL
10	2014-05-06	SAS	POR
12	2014-05-06	SAS	POR
13	2014-05-07	OKC	LAC
15	2014-05-07	OKC	LAC
17	2014-05-10	POR	SAS
27	2014-05-10	POR	SAS
28	2014-05-11	LAC	OKC
32	2014-05-11	LAC	OKC

10 rows in set (0.00 sec)

```
mysql> select * from sponsor_endorses;
```

company	team
AMERICAN AIRLINES	DAL
ANHEUSER-BUSCH	DAL
AT&T	DAL
AUDI	DAL
COCA-COLA	DAL
DR PEPPER SNAPPLE GROUP	DAL
MILLERCOORS	DAL
PLAINS CAPITAL BANK	DAL
TEXAS FORD DEALERS	DAL
TXU	DAL
DODGE	LAC
KIA	LAC
MERCEDEZ BENZ	LAC
STATE FARM INSURANCE	LAC
CHESAPEAKE ENERGY	OKC
DEVON ENERGY	OKC
HERTZ	OKC
LOVE'S COUNTRY'S	OKC
MIDFIRST BANK	OKC
RIVERWIND CASINO	OKC
SANDRIDGE ENERGY	OKC
COMCAST	POR
KIA	POR
NORTHWEST FORD STORES	POR
SPIRIT MOUNTAIN CASINO	POR
WELLS FARGO	POR
BROWN AUTO GROUP	SAS
H-E-B	SAS
SILVER EAGLE DISTRIBUTOR	SAS
SWBC	SAS
USAA	SAS
VALERO	SAS

```
32 rows in set (0.00 sec)
```

```
mysql> select * from venue;
```

venueName	city	address
American Airlines Center	Dallas, TX	2500 Victory Avenue
AT&T Center	San Antonio, TX	1 AT&T Center Parkway
Chesapeake Energy Arena	Oklahoma City, OK	100 West Reno Avenue
Moda Center	Portland, OR	1 Center Court
Staples Center	Los Angeles, CA	1111 S. Figueroa Street

```
5 rows in set (0.00 sec)
```