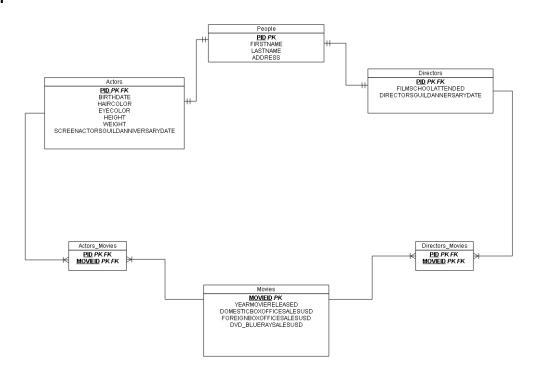
1. E/R Diagram



2. Create Statements

```
-- Create People Table
DROP TABLE IF EXISTS people;

CREATE TABLE people (
PID INT not null,
FIRSTNAME VARCHAR(255) not null,
LASTNAME VARCHAR(255) not null,
ADDRESS VARCHAR(255) not null,
PRIMARY KEY(PID)
);
```

```
-- Create Actors Table
DROP TABLE IF EXISTS actors;
CREATE TABLE actors (
     PID
                                                           INT not null,
     BIRTHDATE
                                                     DATE not null,
     HAIRCOLOR
                                                     VARCHAR (255),
     EYECOLOR
                                                     VARCHAR (255),
     HEIGHT
                                                           FLOAT not null,
     WEIGHT
                                                           FLOAT not null,
     SCREENACTORSGUILDANNIVERSARYDATE DATE.
PRIMARY KEY(PID),
FOREIGN KEY (PID) references people(PID)
);
-- Create Directors Table
DROP TABLE IF EXISTS directors;
CREATE TABLE directors (
     PID
                                                     INT not null,
     FILMSCHOOLATTENDED
                                                     VARCHAR (255),
     DIRECTORSGUILDANNIVERSARYDATE
                                                     DATE,
PRIMARY KEY(PID),
FOREIGN KEY (PID) references people(PID)
);
--Create Movies Table
DROP TABLE IF EXISTS movies;
CREATE TABLE movies (
     MOVIEID
                                               INT not null,
     MOVIENAME
                                               VARCHAR(255) not null,
     YEARMOVIERELEASED
                                               INT not null,
     DOMESTICBOXOFFICESALESUSD
                                               FLOAT,
     FOREIGNBOXOFFICESALESUSD
                                               FLOAT ,
     DVD_BLUERAYSALESUSD
                                               FLOAT,
```

```
PRIMARY KEY (MOVIEID)
);
--Create actors_movies Table
CREATE TABLE actors movies (
      PID
                                       INT not null references actors(PID),
      MovieID
                                             INT not null references movies(MOVIEID),
Primary Key (PID, MOVIEID)
);
-- Create directors movies Table
DROP TABLE IF EXISTS directors_movies;
CREATE TABLE directors movies (
      PID
                                       INT not null references directors(PID),
      MovieID
                                             INT not null references movies(MOVIEID),
Primary Key (PID, MOVIEID)
);
3. Insert Statements
-- People
INSERT INTO people (PID, FIRSTNAME, LASTNAME, ADDRESS)
VALUES ('1', 'Joe', 'Archer', '240 Short Hill Drive Bridgewater New Jersey');
INSERT INTO people (PID, FIRSTNAME, LASTNAME, ADDRESS)
VALUES ('2', 'Steve', 'Archer', '59 Woods End Road Basking Ridge New Jersey');
INSERT INTO people (PID, FIRSTNAME, LASTNAME, ADDRESS)
VALUES ('3', 'Sean', 'Connery', '738 Crest Oak Road Summit New Jersey');
INSERT INTO people (PID, FIRSTNAME, LASTNAME, ADDRESS)
VALUES ('4', 'Dan', 'Lopez', '1313 River Street Corning New York');
INSERT INTO people (PID, FIRSTNAME, LASTNAME, ADDRESS)
VALUES ('5', 'Alex', 'Crudo', '1313 Fairy Road Crow Nest Montana');
```

INSERT INTO people (PID , FIRSTNAME , LASTNAME, ADDRESS) VALUES ('6' ,'Tony' , 'Dasilva' , '112 Victory Lane Bridewater Maine');

INSERT INTO people (PID, FIRSTNAME, LASTNAME, ADDRESS) VALUES ('7', 'Jim', 'Connelly', '1324 Kirkland Road Buffalo New York');

INSERT INTO people (PID , FIRSTNAME , LASTNAME, ADDRESS) VALUES ('8' ,'Tom' , 'Smith' , 'First Road Ashville Texas');

INSERT INTO people (PID , FIRSTNAME , LASTNAME, ADDRESS) VALUES ('9' ,'Bob' , 'Kelly' , '876 Crest Oak Street Somerset New Florida');

-- ACTORS

INSERT INTO actors (PID, BIRTHDATE, HAIRCOLOR, EYECOLOR, HEIGHT, WEIGHT, SCREENACTORSGUILDANNIVERSARYDATE)
VALUES ('1','19931015', 'Black', 'Black', '5.5', '120', '20001213');

INSERT INTO actors (PID, BIRTHDATE, HAIRCOLOR, EYECOLOR, HEIGHT, WEIGHT, SCREENACTORSGUILDANNIVERSARYDATE)
VALUES ('2', '19600512', 'Brown', 'Black', '5.6', '250', '20011213');

INSERT INTO actors (PID, BIRTHDATE, HAIRCOLOR, EYECOLOR, HEIGHT, WEIGHT, SCREENACTORSGUILDANNIVERSARYDATE)
VALUES ('3', '19300825', 'Grey', 'Black', '60', '200', '19750217');

-- DIRECTORS

INSERT INTO directors (PID, FILMSCHOOLATTENDED, DIRECTORSGUILDANNIVERSARYDATE) VALUES ('4', 'Luxburg', '20011213');

INSERT INTO directors (PID, FILMSCHOOLATTENDED, DIRECTORSGUILDANNIVERSARYDATE) VALUES ('5', 'Crowsfeet', '19951209');

INSERT INTO directors (PID, FILMSCHOOLATTENDED, DIRECTORSGUILDANNIVERSARYDATE)
VALUES ('6', 'School Of Lights', '20031215');

-- MOVIES

```
INSERT INTO movies (MOVIEID, MOVIENAME, YEARMOVIERELEASED,
DOMESTICBOXOFFICESALESUSD, FOREIGNBOXOFFICESALESUSD,
DVD BLUERAYSALESUSD)
VALUES ('1', 'MOVIE 1', '1991', '12.11', '123.11', '23.23');
INSERT INTO movies (MOVIEID, MOVIENAME, YEARMOVIERELEASED,
DOMESTICBOXOFFICESALESUSD, FOREIGNBOXOFFICESALESUSD,
DVD BLUERAYSALESUSD)
VALUES ('2', 'MOVIE 2', '1992', '12.11', '123.11', '23.23');
INSERT INTO movies (MOVIEID, MOVIENAME, YEARMOVIERELEASED,
DOMESTICBOXOFFICESALESUSD, FOREIGNBOXOFFICESALESUSD,
DVD BLUERAYSALESUSD)
VALUES ('3', 'MOVIE 3', '1993', '12.11', '123.11', '23.23');
-- directors movies
INSERT INTO directors_movies(MOVIEID ,PID)
VALUES ('1', '4');
INSERT INTO directors_movies(MOVIEID ,PID)
VALUES ('2', '5');
INSERT INTO directors movies(MOVIEID, PID)
VALUES ( '3', '6');
--actors movies
INSERT INTO actors_movies(MOVIEID ,PID)
VALUES ('1', '1');
INSERT INTO actors_movies(MOVIEID ,PID)
VALUES ('2', '2');
INSERT INTO actors movies(MOVIEID, PID)
VALUES ('3', '3');
```

4. -- Functional Dependencies --

-- TABLE People

 $(PID) \rightarrow FIRSTNAME$, LASTNAME, ADDRESS

-- TABLE Actors

(PID) \rightarrow BIRTHDATE , HAIRCOLOR, EYECOLOR , HEIGHT , WEIGHT , SCREENACTORSGUILDANNIVERSARYDATE

-- TABLE Directors

(PID) → FILMSCHOOLATTENDED,
DIRECTORSGUILDANNIVERSARYDATE

-- TABLE Movies

 $(\mathsf{MOVIEID}) \to \mathsf{MOVIENAME} \ , \ \mathsf{YEARMOVIERELEASED} \ , \ \mathsf{DOMESTICBOXOFFICESALESUSD} \ , \ \mathsf{FOREIGNBOXOFFICESALESUSD} \ , \ \mathsf{DVD_BLUERAYSALESUSD}$

-- Actors_Movies

 $(PID, MOVIEID) \rightarrow$

-- Directors_Movies

(PID, MOVIEID) \rightarrow

-- The Query

```
Select distinct LASTNAME , FIRSTNAME
from people
where pid In (
      select pid
      from directors_movies
      where movieid IN (
             select movieid
             from actors_movies
             where pid IN (
                    Select pid
                    from people
                    where lastname = 'Connery' and pid IN (
                           Select pid
                           from people
                           where firstname = 'Sean')
                    )
             )
```