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## E/R Diagram



## Create Statements

```
DROP TABLE IF EXISTS People;
```

```
CREATE TABLE People(
```

```
PID Serial not null,
```

```
firstName varchar(255),
```

```
lastName varchar(255),
```

```
Primary Key(PID)
```

```
);
```

```
DROP TABLE IF EXISTS Movies;
```

```
CREATE TABLE Movies(
```

```
MovieID SERIAL not null,
```

```
MovieName varchar(255) not null,
```

```
MovieYear int not null,
```

```
DomesticBOS numeric(255) not null,
```

```
ForeignBOS numeric Not null,
```

```
DvdSales numeric Not null,
```

Primary Key (MovieID)

);

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,

SAG date,

address varchar(255),

Foreign Key (PID) References People (PID),

Primary Key(PID)

);

DROP TABLE IF EXISTS Directors;

CREATE TABLE Directors(

PID int not null,

filmSchool varchar(255) not null,

DGAD date,

address varchar(255),

Foreign Key (PID) References People (PID),

Primary Key(PID)

);

DROP TABLE IF EXISTS DirectorsIN;

```
CREATE TABLE DirectorsIN (  
  PID int not null,  
  MovieID int not null,  
  Foreign Key (PID) References Directors (PID),  
  Foreign Key (MovieID) References Movies (MovieID),  
  Primary key (Pid,MovieID)  
);
```

```
DROP TABLE IF EXISTS ActorsIN;
```

```
CREATE TABLE ActorsIN (  
  PID int not null,  
  MovieID int not null,  
  Foreign Key (PID) References Actors (PID),  
  Foreign Key (MovieID) References Movies (MovieID),  
  Primary key (Pid,MovieID)  
);
```

Insert Statements

--People

```
INSERT INTO People( FirstName,LastName)
```

```
  VALUES('Daniel','Craig');
```

```
INSERT INTO People( FirstName,LastName)
```

```
  VALUES('Sean','Connery');
```

```
INSERT INTO People( FirstName,LastName)
```

```
  VALUES('Halle','Berry');
```

```
INSERT INTO People( FirstName,LastName)
```

```
  VALUES('Pierce','Brosnan');
```

```
INSERT INTO People( FirstName,LastName)
```

```

VALUES('Guy','Hamilton'); --Goldfinger
INSERT INTO People( FirstName,LastName)

VALUES('Martin','Campbell');--GoldenEYE
INSERT INTO People( FirstName,LastName)

VALUES('Roger','Spottiswoode');--Tomorrow Never Dies
INSERT INTO People( FirstName,LastName)

VALUES('Lee','Tamahori');--Die Another Day
INSERT INTO People( FirstName,LastName)

VALUES('Martin','Campbell');--Casino Royale

```

--ACTORS

```

INSERT INTO Actors(PID,BirthDate,HairColor,eyeColor,height,weight,SAG,address)

VALUES(1,'1968-07-02','blonde','blue',132,163,'1998-05-13','4 Balogne DR Los Angelos');
INSERT INTO Actors(PID,BirthDate,HairColor,eyeColor,height,weight,SAG,address)

VALUES(2,'1930-08-25','white','brown',232,173,'1954-05-13','133 Cheddar DR Trenton');
INSERT INTO Actors(PID,BirthDate,HairColor,eyeColor,height,weight,SAG,address)

VALUES(3,'1980-12-02','black','brown',152,130,'1999-07-23','12 Imaginary DR San Fransico');
INSERT INTO Actors(PID,BirthDate,HairColor,eyeColor,height,weight,SAG,address)

VALUES(4,'1974-3-13','brown','brown',190,153,'1984-10-06','5 Pickle DR Washington D.C ');

```

--Director

```

INSERT INTO Directors(PID,filmSchool,DGAD,address)

VALUES(5,'Academy of Foreign Cheeses','1980-11-02','1232 Chicken Drive Balogne City'); --Goldfinger
INSERT INTO Directors(PID,filmSchool,DGAD,address)

VALUES(6,'Academy of Domestic Salmon','1992-01-01','63 Rooster Drive Ham City');--GoldenEYE
INSERT INTO Directors(PID,filmSchool,DGAD,address)

VALUES(7,'Academy of Foreign Cheeses','1964-06-05','82 Poultry Road Fish City');--Tomorrow Never Dies

```

```
INSERT INTO Directors(PID,filmSchool,DGAD,address)
```

```
VALUES(8,'Academy of Foreign Cheeses','1973-09-10','90 Reeses Ave Cake City');--Die Another Day
```

```
INSERT INTO Directors(PID,filmSchool,DGAD,address)
```

```
VALUES(9,'Academy of Foreign Cheeses','2012-12-12','23 Butter Finger Drive Herseys City');--Casino Royale
```

```
--MOVIES
```

```
INSERT INTO Movies( MovieName, MovieYear, DomesticBos, ForeignBOS, DvdSales)
```

```
VALUES('Goldfinger',1964,124900000,123222444,2422331);
```

```
INSERT INTO Movies( MovieName, MovieYear, DomesticBos, ForeignBOS, DvdSales)
```

```
VALUES('Goldeneye',1995,352194034,163334433,63342321);
```

```
INSERT INTO Movies( MovieName, MovieYear, DomesticBos, ForeignBOS, DvdSales)
```

```
VALUES('Tomorrow Never Dies',1997,333011068,34341233,62522321);
```

```
INSERT INTO Movies( MovieName, MovieYear, DomesticBos, ForeignBOS, DvdSales)
```

```
VALUES('Die Another Day',2002,431971116,162334433,64242321);
```

```
INSERT INTO Movies( MovieName, MovieYear, DomesticBos, ForeignBOS, DvdSales)
```

```
VALUES('Casino Royale',2006,599045960,262334433,34242321);
```

```
INSERT INTO Movies( MovieName, MovieYear, DomesticBos, ForeignBOS, DvdSales)
```

```
VALUES('Diamonds Are Forever',1971,12422425,23433433,3434343321);
```

```
--Actors In
```

```
INSERT INTO ActorsIn(PID,MovieID)
```

```
VALUES(1,5);
```

```
INSERT INTO ActorsIn(PID,MovieID)
```

```
VALUES(2,1);
```

```
INSERT INTO ActorsIn(PID,MovieID)
```

```
VALUES(3,4);
```

```
INSERT INTO ActorsIn(PID,MovieID)
```

```
VALUES(4,3);
```

```
INSERT INTO ActorsIn(PID,MovieID)
VALUES(4,2);
```

```
INSERT INTO ActorsIn(PID,MovieID)
VALUES(2,6);
```

--Directors IN

```
INSERT INTO DirectorsIn(PID,MovieID)
VALUES(5,1);
```

```
INSERT INTO DirectorsIn(PID,MovieID)
VALUES(6,2);
```

```
INSERT INTO DirectorsIn(PID,MovieID)
VALUES(7,3);
```

```
INSERT INTO DirectorsIn(PID,MovieID)
VALUES(8,4);
```

```
INSERT INTO DirectorsIn(PID,MovieID)
VALUES(9,5);
```

```
INSERT INTO DirectorsIn(PID,MovieID)
VALUES(5,6);
```

Query:

```
Select distinct firstName, lastName
```

```
from people
```

```
where pid In (
```

```
    select pid
```

```
    from directorsIN
```

```
    where movieid IN (
```

```
        select movieid
```

```
        from actorsIN
```

```

where pid IN (
    Select pid
    from people
    where lastname = 'Connery'
    and firstName ='Sean'
    )
)
)

```

Functional Dependencies:

People:

PID → First Name and Last Name

Director:

PID → Film School, DGAD, Address

Actor:

PID → Birth Date, Hair color, Eye color, height, weight, SAG, address

Movies:

MovieID → Movie Name, Movie Year, DomesticBOS, ForeignBOS, and DVD

ActorsIN:

(PID, MovieID)→

DirectorsIN:

(PID,MovieID)→