

Brenden Bishop
Normalization HW #2

Part I:

ACTORS

| Name | address | dob | hair_color | eye_color | height | weight | act_guild_date |
|--------------|---------------------|------------|------------|-----------|-----------|---------|----------------|
| Sean Connery | Edinburgh, Scotland | 10/25/1930 | gray | brown | 74 inches | 220 lbs | none |
| Daniel Craig | Cheshire, England | 3/2/1968 | brown | blue | 70 inches | 205 lbs | none |
| Al Pacino | New York, USA | 4/25/1940 | brown | brown | 67 inches | 165 lbs | 2011, 2004 |

MOVIES

| Name | year_released | dombox_sales | forbox_sales | dvd_sales |
|-------------|---------------|--------------|--------------|-------------|
| Thunderball | 1965 | 63,600,000 | 77,600,000 | unknown |
| Goldfinger | 1964 | 51,100,000 | 73,800,000 | unknown |
| Iron Man | 2008 | 318,604,126 | 263,839,000 | 174,949,094 |

DIRECTORS

| Name | address | film_school | dir_guild_date |
|-----------------|----------------|--------------------|----------------|
| Terence Young | Shangai, China | none | none |
| Jon Favreau | New York, USA | Queens College | none |
| Francis Coppola | Michigan, USA | Hofstra University | none |

Actors-Movies

| Actor_name | movie_name |
|----------------|---------------|
| Sean Connery | Goldfinger |
| Sean Connery | Dr. No |
| Pierce Brosnan | GoldenEye |
| Daniel Craig | Casino Royale |

Movies-Directors

| Movie_name | dir_name |
|---------------|-----------------|
| Iron Man | Jon Favreau |
| Goldfinger | Guy Hamilton |
| The Godfather | Francis Coppola |
| Casino Royale | Martin Campbell |

Actors-Directors

| Actor_name | dir_name |
|-------------------|--------------------|
| Sean Connery | Terence Young |
| Sean Connery | Stephen Norrington |
| Robert Downey Jr. | Jon Favreau |
| Al Pacino | Francis Coppola |

Part II:

--- Actors ---

drop table if exists actors;

```
create table actors(  
    aid          int not null serial,  
    name         text not null,  
    address      text,  
    dob          timestamp not null,  
    hair_color   varchar(20),  
    eye_color    varchar(20),  
    height       varchar(10),  
    weight       varchar(10),  
    act_guild_date text,  
    primary key(aid);
```

--- Movies ---

drop table if exists movies;

```
create table movies(  
    mid          int not null serial,  
    name         text not null,  
    year_released year not null,  
    dombox_sales_USD money,  
    forbox_sales_USD money,  
    dvd_sales_USD money,  
    primary key(mid);
```

--- Directors ---

drop table if exists directors;

```
create table directors(  
    did          int not null serial,  
    name         text not null,  
    address      text,  
    film_school  text,  
    dir_guild_date timestamp,  
    primary key(did);
```

--- Actors in the movies ---

drop table if exists actor_movie;

```
create table actor_movie(  
    actor_name text not null references actors.name,  
    movie_name text not null references movies.name,  
    primary key(actor_name, movie_name)  
);
```

--- Movies with their directors ---

```
drop table if exists movie_director;
```

```
create table movie_director(  
    movie_name text not null references movies.name,  
    dir_name text not null references directors.name,  
    primary key(movie_name, dir_name);
```

```
--- Actors with their directors ---
```

```
drop table if exists actor_director;
```

```
create table actor_director(  
    relation_id int not null serial,  
    actor_name text not null references actors.name,  
    dir_name text not null references directors.name,  
    primary key(relation_id);
```

```
--- Actors Inserts ---
```

```
insert into actors(name, address, dob, hair_color, eye_color, height, weight,  
act_guild_date)  
values('Sean Connery', 'Edinburgh, Scotland', '10/25/1930', 'gray', 'brown',  
        '74 inches', '220 lbs', 'null');
```

```
insert into actors(name, address, dob, hair_color, eye_color, height, weight,  
act_guild_date)  
values('Daniel Craig', 'Chester, Cheshire, England', '3/2/1968', 'brown', 'blue',  
        '70 inches', '205 lbs', 'null');
```

```
insert into actors(name, address, dob, hair_color, eye_color, height, weight,  
act_guild_date)  
values('Pierce Brosnan', 'Navan, Co. Meath, Ireland', '5/16/1953', 'brown',  
        'blue', '73 inches', '190 lbs', 'null');
```

```
insert into actors(name, address, dob, hair_color, eye_color, height, weight,  
act_guild_date)  
values('Robert Downey Jr.', 'New York City, New York', '4/4/1965', 'brown',  
        'brown', '69 inches', '170 lbs', '2001');
```

```
insert into actors(name, address, dob, hair_color, eye_color, height, weight,  
act_guild_date)  
values('Natalie Portman', 'Jerusalem, Israel', '6/9/1981', 'brown', 'brown',  
        '63 inches', '115 lbs', '2011');
```

```
insert into actors(name, address, dob, hair_color, eye_color, height, weight,  
act_guild_date)  
values('Al Pacino', 'New York City, New York', '4/25/1940', 'brown', 'brown',  
        '67 inches', '165 lbs', '2011, 2004');
```

--- Movies inserts ---

```
insert into movies(name, year_released, dombox_sales_USD, forbox_sales_USD,
dvd_sales_USD)
    values('Casino Royale', '2006', '167,445,960', '426,793,106', '81,510,078');
```

```
insert into movies(name, year_released, dombox_sales_USD, forbox_sales_USD,
dvd_sales_USD)
    values('V for Vendetta', '2005', '70,511,035', '62,000,000', '58,830,596');
```

```
insert into movies(name, year_released, dombox_sales_USD, forbox_sales_USD,
dvd_sales_USD)
    values('The Godfather', '1972', '134,966,411', '133,533,589', 'null');
```

```
insert into movies(name, year_released, dombox_sales_USD, forbox_sales_USD,
dvd_sales_USD)
    values('Iron Man', '2008', '318,604,126', '263,839,000', '174,949,094');
```

```
insert into movies(name, year_released, dombox_sales_USD, forbox_sales_USD,
dvd_sales_USD)
    values('GoldenEye', '1995', '106,429,941', '250,000,000', '46,040');
```

```
insert into movies(name, year_released, dombox_sales_USD, forbox_sales_USD,
dvd_sales_USD)
    values('The League of Extraordinary Gentlemen', '2003', '66,465,204',
'112,800,000', '36,400,000');
```

```
insert into movies(name, year_released, dombox_sales_USD, forbox_sales_USD,
dvd_sales_USD)
    values('Dr. No', '1962', '16,067,035', '43,500,000', 'null');
```

```
insert into movies(name, year_released, dombox_sales_USD, forbox_sales_USD,
dvd_sales_USD)
    values('Goldfinger', '1964', '51,100,000', '73,800,000', 'null');
```

```
insert into movies(name, year_released, dombox_sales_USD, forbox_sales_USD,
dvd_sales_USD)
    values('Thunderball', '1965', '63,600,000', '77,600,000', 'null');
```

--- Director Inserts ---

```
insert into directors(name, address, film_school, dir_guild_date)
    values('Martin Campbell', 'Hastings, New Zealand', 'null', 'null');
```

```
insert into directors(name, address, film_school, dir_guild_date)
```

```

        values('James McTeigue', 'Sydney, Australia', 'null', 'null');

insert into directors(name, address, film_school, dir_guild_date)
    values('Stephen Norrington', 'London, England', 'null', 'null');

insert into directors(name, address, film_school, dir_guild_date)
    values('Guy Hamilton', 'Paris, France', 'null', 'null');

insert into directors(name, address, film_school, dir_guild_date)
    values('Terence Young', 'Shanghai, China', 'null', 'null');

insert into directors(name, address, film_school, dir_guild_date)
    values('Jon Favreau', 'Queens, New York', 'Queens College', 'null');

insert into directors(name, address, film_school, dir_guild_date)
    values('Francis Coppola', 'Detroit, Michigan', 'Hofstra University', 'null');

--- Actors in the movies ---

insert into actor_movie (actor_name, movie_name)
    values('Sean Connery', 'The League of Extraordinary Gentlemen');

insert into actor_movie (actor_name, movie_name)
    values('Sean Connery', 'Dr. No');

insert into actor_movie (actor_name, movie_name)
    values('Sean Connery', 'Goldfinger');

insert into actor_movie (actor_name, movie_name)
    values('Sean Connery', 'Thunderball');

insert into actor_movie (actor_name, movie_name)
    values('Daniel Craig', 'Casino Royale');

insert into actor_movie (actor_name, movie_name)
    values('Pierce Brosnan', 'GoldenEye');

insert into actor_movie (actor_name, movie_name)
    values('Robert Downey Jr.', 'Iron Man');

insert into actor_movie (actor_name, movie_name)
    values('Natalie Portman', 'V for Vendetta');

insert into actor_movie (actor_name, movie_name)
    values('Al Pacino', 'The Godfather');

```

--- Movies with their directors ---

```
insert into movie_director (movie_name, dir_name)
    values('GoldenEye', 'Martin Campbell');
```

```
insert into movie_director (movie_name, dir_name)
    values('Casino Royale', 'Martin Campbell');
```

```
insert into movie_director (movie_name, dir_name)
    values('Dr. No', 'Terence Young');
```

```
insert into movie_director (movie_name, dir_name)
    values('Thunderball', 'Terence Young');
```

```
insert into movie_director (movie_name, dir_name)
    values('V for Vendetta', 'James McTeigue');
```

```
insert into movie_director (movie_name, dir_name)
    values('Goldfinger', 'Guy Hamilton');
```

```
insert into movie_director (movie_name, dir_name)
    values('The League of Extraordinary Gentlemen', 'Stephen
Norrington');
```

```
insert into movie_director (movie_name, dir_name)
    values('Iron Man', 'Jon Favreau');
```

```
insert into movie_director (movie_name, dir_name)
    values('The Godfather', 'Francis Coppola');
```

--- Actors with their directors ---

```
insert into actor_director (actor_name, dir_name)
    values('Sean Connery', 'Terence Young');
```

```
insert into actor_director (actor_name, dir_name)
    values('Sean Connery', 'Guy Hamilton');
```

```
insert into actor_director (actor_name, dir_name)
    values('Sean Connery', 'Stephen Norrington');
```

```
insert into actor_director (actor_name, dir_name)
    values('Daniel Craig', 'Martin Campbell');
```

```
insert into actor_director (actor_name, dir_name)
    values('Pierce Brosnan', 'Martin Campbell');
```

```
insert into actor_director (actor_name, dir_name)
      values('Robert Downey Jr.', 'Jon Favreau');
```

```
insert into actor_director (actor_name, dir_name)
      values('Natalie Portman', 'James McTeigue');
```

```
insert into actor_director (actor_name, dir_name)
      values('Al Pacino', 'Francis Coppola');
```

--- Functional Dependencies ---

Actors Table:

aid -> name

aid -> address

aid -> dob

aid -> hair_color

aid -> eye_color

aid -> height

aid -> weight

aid -> act_guild_date

Movies Table:

mid -> year_released

mid -> dombox_sales

mid -> forbox_sales

mid -> dvd_sales

Directors Table:

did -> name

did -> address

did -> film_school

did -> dir_guild_date

--- SQL Query ---

```
select from actor_director
where actor_name = 'Sean Connery';
```