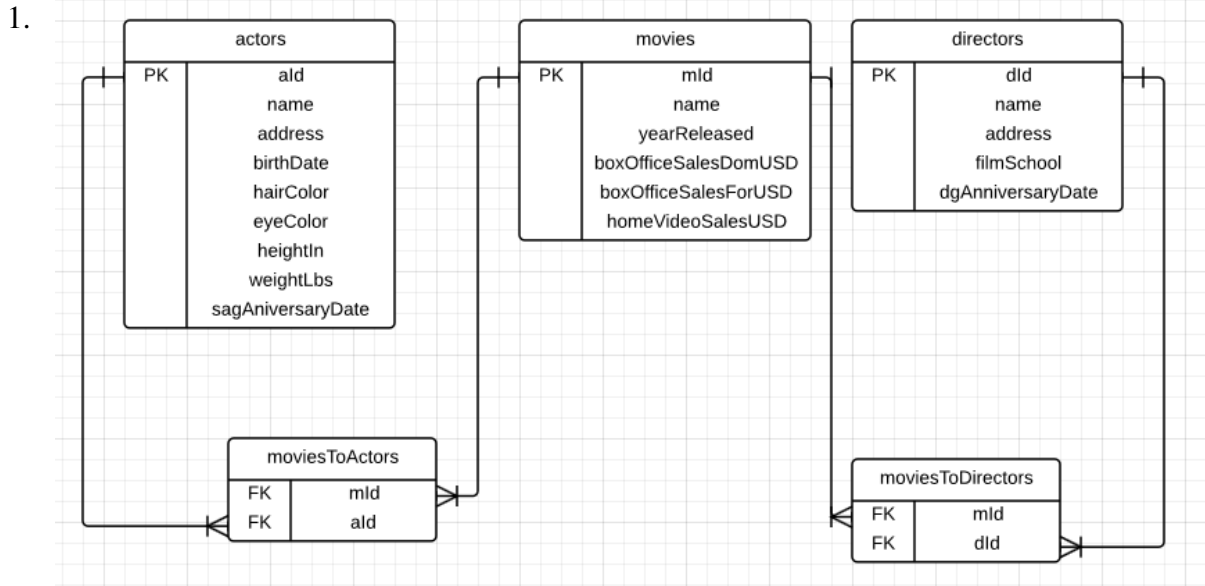Mike Mucci
Lab 8 - Normalization II
Alan Labouseur
4/3/2014

1.

2.
```
CREATE TABLE actors(
        aId                   TEXT NOT NULL,
        name                  TEXT NOT NULL,
        address               TEXT,
        birthDate             DATE,
        hairColor             TEXT,
        eyeColor              TEXT,
        heightIn              FLOAT,
        weightLbs             FLOAT,
        sagAnniversaryDate    DATE,
        PRIMARY KEY(aId)
);
CREATE TABLE movies(
        mId                   TEXT NOT NULL,
        name                  TEXT NOT NULL,
        yearReleased          DATE,
        boxOfficeSalesDomUSD  NUMERIC(10,2),
        boxOfficeSalesForUSD  NUMERIC(10,2),
        homeVideoSalesUSD     NUMERIC(10,2),
        PRIMARY KEY(mId)
);
CREATE TABLE directors(
        dId                   TEXT NOT NULL,
        name                  TEXT NOT NULL,
        address               TEXT,
        filmSchool            TEXT,
        dgAnniversaryDate     DATE,
        PRIMARY KEY(dId)
);
```

```sql
CREATE TABLE moviesToActors(
        mId                     TEXT NOT NULL REFERENCES movies(mId),
        aId                     TEXT NOT NULL REFERENCES actors(aId)
);
CREATE TABLE moviesToDirectors(
        mId                     TEXT NOT NULL REFERENCES movies(mId),
        dId                     TEXT NOT NULL REFERENCES directors(dId)
);
```

3.
```sql
--Directors--
INSERT INTO directors (dId,name,address,filmSchool,dgAnniversaryDate)
VALUES ('d001','Terence Young','dummy','data',current_date);

INSERT INTO directors (dId,name,address,filmSchool,dgAnniversaryDate)
VALUES ('d002','John McTiernan','dummy','data',current_date);

INSERT INTO directors (dId,name,address,filmSchool,dgAnniversaryDate)
VALUES ('d003','Steven Spielberg','dummy','data',current_date);

INSERT INTO directors (dId,name,address,filmSchool,dgAnniversaryDate)
VALUES ('d004','Guy Hamilton','dummy','data',current_date);

INSERT INTO directors (dId,name,address,filmSchool,dgAnniversaryDate)
VALUES ('d005','Chris Buck','dummy','data',current_date);

INSERT INTO directors (dId,name,address,filmSchool,dgAnniversaryDate)
VALUES ('d006','Jennifer Lee','dummy','data',current_date);


--Movies--
INSERT INTO movies
(mId,name,yearReleased,boxOfficeSalesDomUSD,boxOfficeSalesForUSD,homeVideoSalesUSD)
VALUES ('m001','Dr. No',current_date,13333.37,21.12,4107.00);

INSERT INTO movies
(mId,name,yearReleased,boxOfficeSalesDomUSD,boxOfficeSalesForUSD,homeVideoSalesUSD)
VALUES ('m002','The Hunt for Red October',current_date,13333.37,21.12,4107.00);

INSERT INTO movies
(mId,name,yearReleased,boxOfficeSalesDomUSD,boxOfficeSalesForUSD,homeVideoSalesUSD)
VALUES ('m003','Indiana Jones and the Last Crusade',current_date,13333.37,21.12,4107.00);

INSERT INTO movies
(mId,name,yearReleased,boxOfficeSalesDomUSD,boxOfficeSalesForUSD,homeVideoSalesUSD)
VALUES ('m004','Goldfinger',current_date,13333.37,21.12,4107.00);

INSERT INTO movies
(mId,name,yearReleased,boxOfficeSalesDomUSD,boxOfficeSalesForUSD,homeVideoSalesUSD)
VALUES ('m005','Frozen',current_date,13333.37,21.12,4107.00);

--Actors--
INSERT INTO actors
(aId,name,address,birthDate,hairColor,eyeColor,heightIn,weightLbs,sagAnniversaryDate)
VALUES ('a001','Sean Connery','Edinburgh, Scotland, UK','1930-8-25','white','brown',72,180,'1980-6-14');
```

```sql
INSERT INTO actors
(aId,name,address,birthDate,hairColor,eyeColor,heightIn,weightLbs,sagAnniversaryDate)
VALUES ('a002','Will Smith','Edinburgh, NotScotland, NotUK','1968-4-28','white','brown',72,180,'1980-6-14');

INSERT INTO actors
(aId,name,address,birthDate,hairColor,eyeColor,heightIn,weightLbs,sagAnniversaryDate)
VALUES ('a003','Hobbits','Isengard','2001-01-01','brown','brown',36,100,'2002-6-11');

INSERT INTO actors
(aId,name,address,birthDate,hairColor,eyeColor,heightIn,weightLbs,sagAnniversaryDate)
VALUES ('a004','Alan','IfKnownMustPerish','2012-07-07','brown','bluebrown',36,100,'2002-6-11');

INSERT INTO actors
(aId,name,address,birthDate,hairColor,eyeColor,heightIn,weightLbs,sagAnniversaryDate)
VALUES ('a005','Idina Menzel','Arendelle','1990-12-07','brown','bluebrown',36,100,'2002-6-11');

--Movies to Actors--
INSERT INTO moviesToActors(mId,aId)
VALUES ('m001','a001');

INSERT INTO moviesToActors(mId,aId)
VALUES ('m002','a001');

INSERT INTO moviesToActors(mId,aId)
VALUES ('m003','a001');

INSERT INTO moviesToActors(mId,aId)
VALUES ('m004','a001');

INSERT INTO moviesToActors(mId,aId)
VALUES ('m005','a005');

--Movies to Directors--
INSERT INTO moviesToDirectors(mId,dId)
VALUES ('m001','d001');

INSERT INTO moviesToDirectors(mId,dId)
VALUES ('m002','d002');

INSERT INTO moviesToDirectors(mId,dId)
VALUES ('m003','d003');

INSERT INTO moviesToDirectors(mId,dId)
VALUES ('m004','d004');

INSERT INTO moviesToDirectors(mId,dId)
VALUES ('m005','d005');

INSERT INTO moviesToDirectors(mId,dId)
VALUES ('m005','d006');
```

4. aId→ (name, address, birthDate, hairColor, eyeColor, heightIn, weightLbs, sagAnniversaryDate)
   mId→(name, yearReleased, boxOfficeSalesDomUSD, boxOfficeSalesForUSD, homeVideoSalesUSD)

dId→(name, address, filmSchool, dgAnniversaryDate)

5. .
   SELECT directors.name
   FROM moviesToActors
   JOIN moviesToDirectors
   ON moviesToActors.mId = moviesToDirectors.mId
   JOIN directors
   ON moviesToDirectors.dId = directors.dId
   WHERE aId IN (SELECT aId FROM actors WHERE name = 'Sean Connery')