HollywooDB

Hollywood DataBase

An Advanced SQL Movie Database

Team 3

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CIS 353 (Database) Winter 2017

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Database Description

Big Picture

The relational database structure we've designed is reminiscent of the schema employed via Internet Movie Database (IMDB). Much like IMDB our design accommodates various types of entities and relationships associated with Hollywood film productions. There are many relationships and associations that can be derived from every single production, and this database will serve as a small but powerful means to be able to illustrate the extent of those relationships.

This database schema will provide the user the ability to see nearly every facet of a particular film. It will hold various amounts of data regarding each film. The data types involved ranging from the box office profits generated by a film during the first week post-release to the age of a production company's employees to film attendance rates to name a few. This relational design has the potential to appeal a semi-large audience, that might include (obligatory) film buffs, as well as production companies, investors, actors, agents, etc.

Person

Every person has a name (unique), date of birth, sex, and a primary role working on a movie. A person is hired by a production company and the date the person is hired is recorded. Every person listed in the database must work on a movie .

Movie

The "center", so to speak, of our database. This will show how much really goes into the making of a film. A movie will have a title (unique), a duration, a numerical rating, and a record of whether or not it received a good review by a critic (think thumbs up, or thumbs down). The rating of the film must be any integer between 1 and 5 . A movie can also have multiple awards and be categorized by multiple genres. Every movie may be worked on by multiple people and must be worked on by at least one person. A movie may have box office data. A movie must be released by a production company, the date of it's release is recorded. A movie may be distributed by many distributors, and when it is the following are recorded: distribution date, distribution medium, and country of distribution.

Production Company

The production company is the business funding the film. This means they deal with everything from set building to actors assistants. It will have a company name (unique) and the year the company was founded. Every person who is hired, is hired by the production company and the date that person is hired is recorded. The production company releases many movies, and the date is recorded when each movie is released.

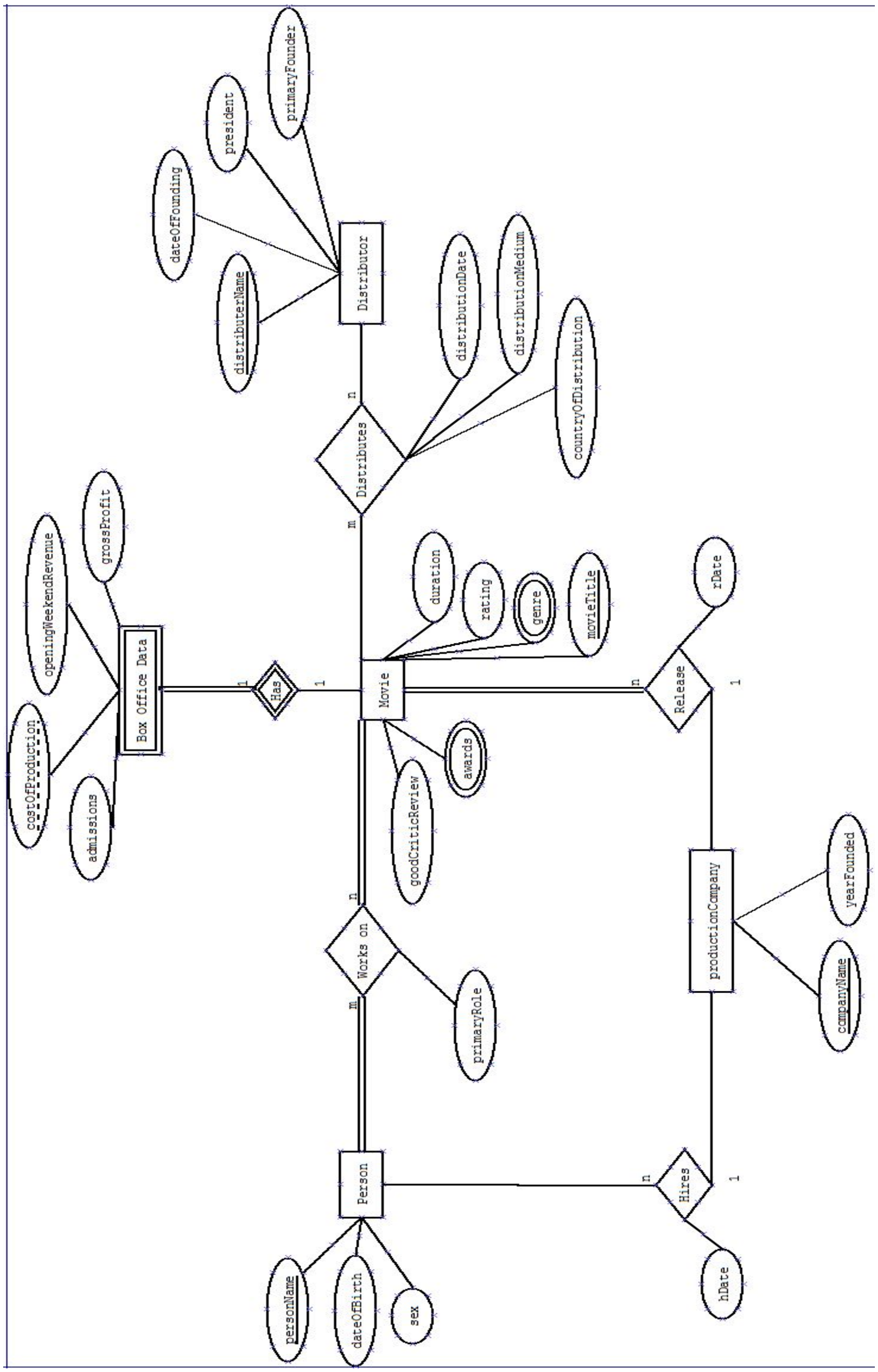
Distributor

A distributor of film is different from the production company. For example, a film may have been made by 20th Century Fox, but ended up being brought to the public by way of Netflix. Every distributor has a unique name, a date of founding, a president, and primary founder. When a distributor distributes movies the following are recorded: distribution date, distribution medium, and country of distribution. The date of distribution can help indicate why attendance was high or low during that period of time. The medium that it is distributed on can range from 8mm film, to a digital streaming service.

Box Office Data

The box office data stores all the financial data for each given movie. A combination of the movie's name and the movie's production cost will uniquely identify the set of data. Box office data will keep track of attendance of at the cinema. It will keep track of ticket sales in the opening week. It will also record the film's cost of production and gross profit.

ER Diagram


Distributor
distributerName
dateOfFounding
president
primaryFounder
Distributes
n
m
distributionDate
distributionMedium
countryOfDistribution
Box Office Data
openingWeekendRevenue
grossProfit
costOfProduction
admissions
Has
1
1
Movie
duration
rating
genre
movieTitle
awards
goodCriticReview
Release
n
1
rDate
Works on
n
m
primaryRole
productionCompany
yearFounded
companyName
Person
personName
dateOfBirth
sex
Hires
n
1
hDate

Boyce-Codd Normal Form Relational Schema

Person (personName, companyName, hireDate, dateOfBirth, sex,)

Movie (movieTitle, duration, rating, companyName, goodCriticReview)

Distributor (distributorName, dateOfFounding, president, primaryFounder)

Production Company (companyName, yearFounded)

Box Office Data (costOfProduction, movieTitle, admissions, openingWeekendRevenue, grossProfit)

Awards (movieTitle, award)

Genre (movieTitle, genre)

Works On (personName, movieTitle, primaryRole)

Distributes (distributorName, movieTitle, distributionDate, distributionMedium, countryOfDistribution)

Integrity Constraints

IC name & table(s)	IC type	English statement	Page # where implemented	Page # where tested
mICKEY, primary key of the movie table.	Key	This key cannot be null and must be unique	**8**	**26**
dil, distributor table and distributes table	Foreign Key	If a movie is deleted the corresponding row in the works_on table must be deleted.	**10**	**26**
mIC2, movie table	1-attribute	Rating must be an integer between 1 and 5.	**8**	**27**
mIC3, movie table	2-attribute, 1-Row	To have a rating greater than 4, the movie must have 1 good critic review	**8**	**27**

project.out (Appendix)

```
SQL> SET ECHO ON
SQL> SET WRAP OFF
SQL> /*
SQL> CIS353 - Movie Database Design Project
SQL> Derrik Flemming
SQL> Alex Duncanson
SQL> Nathan Lindenbaum
SQL> Mike Ames
SQL> */
SQL> --
SQL> --
SQL> -- ------------------------------------------------
SQL> -- Creating Schema
SQL> -- ------------------------------------------------
SQL> --
SQL> -- Drop pre-existing tables if present.
SQL> --
SQL> DROP TABLE movie CASCADE CONSTRAINTS;

Table dropped.

SQL> DROP TABLE person CASCADE CONSTRAINTS;

Table dropped.

SQL> DROP TABLE production_company CASCADE CONSTRAINTS;

Table dropped.

SQL> DROP TABLE distributor CASCADE CONSTRAINTS;

Table dropped.

SQL> DROP TABLE box_office CASCADE CONSTRAINTS;

Table dropped.

SQL> DROP TABLE awards CASCADE CONSTRAINTS;

Table dropped.

SQL> DROP TABLE genre CASCADE CONSTRAINTS;

Table dropped.
```

```
SQL> DROP TABLE works_on CASCADE CONSTRAINTS;

Table dropped.

SQL> DROP TABLE distributes CASCADE CONSTRAINTS;

Table dropped.

SQL> --
SQL> -- Create new tables
SQL> CREATE TABLE production_company (
  2    companyName       varchar2(50) PRIMARY KEY,
  3    yearFounded       number(4),
  4  --
  5  CONSTRAINT pcIC1 CHECK(yearFounded >= 1800 AND yearFounded <= 2017)
  6  );

Table created.

SQL> --
SQL> CREATE TABLE movie (
  2    movieTitle        varchar2(50) PRIMARY KEY NOT NULL,
  3    cName                     varchar2(50),
  4    duration        number(4) NOT NULL,
  5    rating                         number(1) NOT NULL,
  6    gCreview                       number(1) NOT NULL,
  7  --
  8  CONSTRAINT mIC1 UNIQUE (movieTitle, cName),
  9  CONSTRAINT mIC2 CHECK (rating IN ('1','2','3','4','5')),
 10  CONSTRAINT mIC3 CHECK (NOT (rating > '3' AND gCreview < '1'))
 11  );

Table created.

SQL> --
SQL> CREATE TABLE person (
  2    personName        varchar2(50) PRIMARY KEY,
  3    cName                varchar2(50),
  4    hDate                date,
  5    dateOfBirth          date,
  6    sex                  char(1) NOT NULL,
  7  --
  8  CONSTRAINT pIC1 CHECK (sex IN('m','f')),
  9  CONSTRAINT pIC2 CHECK (dateOfBirth between date '1800-01-01' and date
'2017-04-15')
 10  );

Table created.

SQL> --
SQL> CREATE TABLE distributor (
  2    distributorName           varchar2(50) PRIMARY KEY,
  3    dateOfFounding        date,
  4    president      varchar2(50),
  5    founder               varchar2(50)
  6  --
  7  );

Table created.

SQL> --
SQL> CREATE TABLE box_office (
  2    mTitle                    varchar2(50),
  3    costOfProduction    varchar2(15),
  4    admissions                number(15),
  5    openingWeekendRevenue           number(15),
  6    grossProfit         number(15),
  7    PRIMARY KEY (costOfProduction, mTitle),
  8  --
  9  CONSTRAINT boIC1 CHECK (openingWeekendRevenue >= 0)
 10  --
 11  );

Table created.

SQL> --
SQL> CREATE TABLE awards (
  2    mTitle                   varchar2(50),
  3    mAward                   varchar2(50),
  4    PRIMARY KEY (mTitle, mAward)
  5  --
  6  );

Table created.

SQL> --
SQL> CREATE TABLE genre (
  2    mTitle            varchar2(50),
  3    mGenre              varchar2(50),
  4    PRIMARY KEY (mTitle, mGenre)
  5  --
  6  );

Table created.

SQL> --
SQL> CREATE TABLE works_on (
  2    personName      varchar2(50),
  3    movieTitle      varchar2(50),
  4    primaryRole     varchar2(25),
  5    PRIMARY KEY (personName, movieTitle)
  6  --
  7  );

Table created.

SQL> --
SQL> CREATE TABLE distributes (
  2    distributorName           varchar2(50),
  3    movieTitle        varchar2(50),
  4    distributionDate      date,
  5    distributionMedium    varchar2(20),
  6    country                 varchar2(20),
  7    PRIMARY KEY (distributorName, movieTitle),
  8    CONSTRAINT di1 FOREIGN KEY (distributorName) REFERENCES distributor
(distributorName) ON DELETE CASCADE
  9  --
 10  );

Table created.

SQL> --
SQL> -- Adding foreign keys:
SQL> ALTER TABLE movie
  2  ADD FOREIGN KEY (cName) REFERENCES production_company (companyName)
  3  Deferrable initially deferred;

Table altered.

SQL> --
SQL> ALTER TABLE box_office
  2  ADD FOREIGN KEY (mtitle) REFERENCES movie (movieTitle)
  3  Deferrable initially deferred;

Table altered.

SQL> --
SQL> ALTER TABLE awards
  2  ADD FOREIGN KEY (mTitle) REFERENCES movie (movieTitle)
  3  Deferrable initially deferred;

Table altered.

SQL> --
SQL> ALTER TABLE genre
  2  ADD FOREIGN KEY (mTitle) REFERENCES movie (movieTitle)
  3  Deferrable initially deferred;

Table altered.
```

```
SQL> --
SQL> ALTER TABLE person
  2  ADD FOREIGN KEY (cName) REFERENCES production_company (companyName)
  3  Deferrable initially deferred;

Table altered.

SQL> --
SQL> ALTER TABLE works_on
  2  ADD FOREIGN KEY (personName) REFERENCES person (personName)
  3  ADD FOREIGN KEY (movieTitle) REFERENCES movie (movieTitle)
  4  Deferrable initially deferred;

Table altered.

SQL> --
SQL> ALTER TABLE distributes
  2  ADD FOREIGN KEY (movieTitle) REFERENCES movie (movieTitle)
  3  Deferrable initially deferred;

Table altered.

SQL> --
SQL> --
SQL> SET FEEDBACK OFF
SQL> --
SQL> -- -------------------------------------------------------------
SQL> -- Populate the database
SQL> -- -------------------------------------------------------------
SQL> --
SQL> alter session set NLS_DATE_FORMAT = 'MM/DD/YYYY';
SQL> --
SQL> -- movie inserts
SQL> --
SQL> INSERT INTO movie VALUES ('The Wizard of Oz', 'JR Agencies', '101',5 , 2);
SQL> INSERT INTO movie VALUES ('Citizen Kane', '5-0 Management', '119', 4, 2);
SQL> INSERT INTO movie VALUES ('The Third Man', '5-0 Management', '104', 5, 3);
SQL> INSERT INTO movie VALUES ('MM : Fury Road', 'LA Management', '120', 5, 2);
SQL> INSERT INTO movie VALUES ('All About Eve', 'PW Management', '138', 5, 3);
SQL> INSERT INTO movie VALUES ('The Cabinet of Dr. Caligari', 'Blues Bros Management',
'52',4, 4);
SQL> INSERT INTO movie VALUES ('Inside Out', 'JR Agencies', '94',3, 5);
SQL> INSERT INTO movie VALUES ('The Godfather', 'JR Agencies', '175',3, 6);
SQL> INSERT INTO movie VALUES ('Metropolis', 'EL Management', '115', 4, 3);
SQL> INSERT INTO movie VALUES ('Get Out', 'PW Management', '104', 3, 4);
SQL> INSERT INTO movie VALUES ('Modern Times', 'PW Management', '87', 5, 7);
SQL> INSERT INTO movie VALUES ('E.T. The Extra-Terrestrial', 'Blues Bros
Management','114', 3, 4);
SQL> INSERT INTO movie VALUES ('Singin in the Rain', 'PW Management', '102',4, 3);
SQL> INSERT INTO movie VALUES ('It Happened One Night', 'PW Management', '105',3, 5);
SQL> INSERT INTO movie VALUES ('Casablanca', 'Blues Bros Management', '102',4, 4);
SQL> INSERT INTO movie VALUES ('Animal House', '5-0 Management', '109',5, 4);
SQL> INSERT INTO movie VALUES ('Pineapple Express', 'HI GH Agencies','117',5, 4);
SQL> INSERT INTO movie VALUES ('Drillbit Taylor', 'LA Management','102',5, 5);
SQL> --
SQL> -- person inserts
SQL> --
SQL> INSERT INTO person VALUES('Will Smith','PW
Management','10/15/2016','09/25/1968','m');
SQL> INSERT INTO person VALUES('John Smith','PW
Management','3/22/2014','02/12/1965','m');
SQL> INSERT INTO person VALUES('Jason Momoa','JR
Agencies','1/19/2012','08/01/1979','m');
SQL> INSERT INTO person VALUES('Emma Watson','PW
Management','07/05/2009','04/15/1990','f');
SQL> INSERT INTO person VALUES('Abby Hall','JR
Agencies','02/24/2013','06/14/1987','f');
SQL> INSERT INTO person VALUES('Seth Rogen','HI GH
Agencies','09/27/2015','04/15/1982','m');
SQL> INSERT INTO person VALUES('James Franco','HI GH
Agencies','04/20/2006','04/19/1978','m');
SQL> INSERT INTO person VALUES('Emily Jones','EL
Management','09/04/2016','08/01/1977','f');
SQL> INSERT INTO person VALUES('George Mann','EL
Management','05/15/2012','12/02/1978','m');
SQL> INSERT INTO person VALUES('John Belushi','Blues Bros
Management','05/15/1978','01/24/1949','m');
SQL> INSERT INTO person VALUES('Kevin Bacon','5-0
Management','05/15/2012','12/02/1978','m');
SQL> INSERT INTO person VALUES('Casey Boersma','LA
Management','01/01/2008','01/13/1995','m');
SQL> INSERT INTO person VALUES('Dylan Boersma','LA
Management','05/15/2008','01/13/1995','m');
SQL> --
SQL> -- production company inserts
SQL> --
SQL> INSERT INTO production_company VALUES('PW Management',1923);
SQL> INSERT INTO production_company VALUES('JR Agencies',1928);
SQL> INSERT INTO production_company VALUES('HI GH Agencies',1997);
SQL> INSERT INTO production_company VALUES('EL Management',1935);
SQL> INSERT INTO production_company VALUES('Blues Bros Management',1912);
SQL> INSERT INTO production_company VALUES('5-0 Management',1986);
SQL> INSERT INTO production_company VALUES('LA Management',1912);
SQL> --
SQL> -- distributor inserts
SQL> --
SQL> INSERT INTO distributor VALUES('Warner Bros. Pictures','10/09/95','Kevin
Tsujihara','Jesse L. Lasky');
SQL> INSERT INTO distributor VALUES('RKO Radio Pictures','01/24/89', 'DEFUNCT',
'Joseph P. Kennedy Sr.');
```

```
SQL> INSERT INTO distributor VALUES('Rialto Pictures','03/12/93','Bruce Goldstein',
'Bruce Goldstein');
SQL> INSERT INTO distributor VALUES('20th Century Fox','07/05/82', 'Stacey Snider',
'William Fox');
SQL> INSERT INTO distributor VALUES('Paramount Pictures','10/09/95','Jim Gianopulos',
'Jesse L. Lasky');
SQL> INSERT INTO distributor VALUES('Disney/Pixar','12/17/77', 'Robert A. Iger', 'Walt
Disney');
SQL> INSERT INTO distributor VALUES('Universal Pictures','02/20/88', 'Ronald Meyer',
'Carl Laemmle');
SQL> INSERT INTO distributor VALUES('United Artists','08/24/86', 'Mark Burnette',
'Charlie Chaplain');
SQL> INSERT INTO distributor VALUES('MGM','10/09/95', 'Gary Barber', 'Jesse L.
Lasky');
SQL> INSERT INTO distributor VALUES('Sony Pictures Home Entertainment','10/24/03',
'Man Jit Singh', 'Masaru Ibuka');
SQL> --
SQL> -- distributes inserts
SQL> --
SQL> INSERT INTO distributes VALUES('Warner Bros. Pictures','The Wizard of
Oz','10/24/03','dvd','United States');
SQL> INSERT INTO distributes VALUES('RKO Radio Pictures','Citizen
Kane','10/20/04','dvd','United Kingdom');
SQL> INSERT INTO distributes VALUES('Rialto Pictures','The Third
Man','07/18/2000','dvd','United States');
SQL> INSERT INTO distributes VALUES('20th Century Fox','MM : Fury
Road','08/27/06','vcr','Denmark');
SQL> INSERT INTO distributes VALUES('Paramount Pictures','All About
Eve','04/12/02','vcr','United States');
SQL> INSERT INTO distributes VALUES('Disney/Pixar','The Cabinet of Dr.
Caligari','10/20/99','dvd','Iraq');
SQL> INSERT INTO distributes VALUES('Universal Pictures','Inside
Out','02/24/05','vcr','United States');
SQL> INSERT INTO distributes VALUES('Universal Pictures','The
Godfather','07/28/78','vcr','Djibouti');
SQL> INSERT INTO distributes VALUES('Sony Pictures Home Entertainment','Pineapple
Express','08/06/08','dvd','United States');
SQL> INSERT INTO distributes VALUES('MGM','Drillbit Taylor','03/21/08','dvd','United
States');
SQL> --
SQL> -- box office inserts
SQL> --
SQL> INSERT INTO box_office VALUES('The Wizard of
Oz',4897362,1235986,156872,985634587);
SQL> INSERT INTO box_office VALUES('Citizen Kane',1235986,1286475,968725,547862354);
SQL> INSERT INTO box_office VALUES('The Third
Man',84927489,17854963,123748,234658971);
SQL> INSERT INTO box_office VALUES('MM : Fury Road',1726374,1235986,854721,127653892);
SQL> INSERT INTO box_office VALUES('All About Eve',1236453,17854963,765843,234856975);
SQL> INSERT INTO box_office VALUES('The Cabinet of Dr.
Caligari',1829374,1596734,657921,542376854);
SQL> INSERT INTO box_office VALUES('Inside Out',1726456,17854963,435678,954723612);
SQL> INSERT INTO box_office VALUES('The Godfather',1829476,17854963,349685,124578965);
SQL> INSERT INTO box_office VALUES('Metropolis',1728475,1235986,754865,325412578);
SQL> INSERT INTO box_office VALUES('Get Out',1827465,17854963,346218,236521452);
SQL> INSERT INTO box_office VALUES('Modern Times',1827475,1286475,546231,458756325);
SQL> INSERT INTO box_office VALUES('E.T. The
Extra-Terrestrial',1728472,17854963,742131,632541258);
SQL> INSERT INTO box_office VALUES('Singin in the
Rain',1827462,1235986,355684,147896321);
SQL> INSERT INTO box_office VALUES('It Happened One
Night',1829423,1596734,241322,258967413);
SQL> INSERT INTO box_office VALUES('Casablanca',1829423,1286475,235687,563254100);
SQL> INSERT INTO box_office VALUES('Animal House',3000000,1200341,479138,141600000);
SQL> INSERT INTO box_office VALUES('Pineapple
Express',27000000,14000000,23245025,87341380);
SQL> INSERT INTO box_office VALUES('Drillbit
Taylor',40000000,5555555,10309986,32853640);
SQL> --
SQL> -- works_on inserts
SQL> --
SQL> INSERT INTO works_on VALUES('Will Smith','Modern Times','actor');
SQL> INSERT INTO works_on VALUES('John Smith','It Happened One Night','booking
agent');
SQL> INSERT INTO works_on VALUES('Jason Momoa','Inside Out','actor');
SQL> INSERT INTO works_on VALUES('Emma Watson','It Happened One Night','actress');
SQL> INSERT INTO works_on VALUES('Abby Hall','Inside Out','booking agent');
SQL> INSERT INTO works_on VALUES('Seth Rogen','Pineapple Express','actor');
SQL> INSERT INTO works_on VALUES('James Franco','Pineapple Express','actor');
SQL> INSERT INTO works_on VALUES('Emily Jones','Metropolis','director');
SQL> INSERT INTO works_on VALUES('George Mann','Metropolis','producer');
SQL> INSERT INTO works_on VALUES('John Belushi','Casablanca','actor');
SQL> INSERT INTO works_on VALUES('Kevin Bacon','The Third Man','actor');
SQL> INSERT INTO works_on VALUES('Casey Boersma','Drillbit Taylor','actor');
SQL> INSERT INTO works_on VALUES('Dylan Boersma','Drillbit Taylor','actor');
SQL> --
SQL> -- awards inserts
SQL> --
SQL> INSERT INTO awards VALUES ('The Wizard of Oz','Film of The Year');
SQL> INSERT INTO awards VALUES ('Citizen Kane','Academy Award');
SQL> INSERT INTO awards VALUES ('The Third Man','Film of The Year');
SQL> INSERT INTO awards VALUES ('MM : Fury Road','Academy Award');
SQL> INSERT INTO awards VALUES ('All About Eve','Academy Award');
SQL> INSERT INTO awards VALUES ('The Cabinet of Dr. Caligari','Film of The Year');
SQL> INSERT INTO awards VALUES ('Inside Out','Academy Award');
SQL> INSERT INTO awards VALUES ('The Godfather','Film of The Year');
SQL> INSERT INTO awards VALUES ('Metropolis','Academy Award');
SQL> INSERT INTO awards VALUES ('Get Out','Film of The Year');
SQL> INSERT INTO awards VALUES ('Modern Times','Academy Award');
SQL> INSERT INTO awards VALUES ('E.T. The Extra-Terrestrial','Film of The Year');
SQL> INSERT INTO awards VALUES ('Singin in the Rain','Academy Award');
SQL> INSERT INTO awards VALUES ('It Happened One Night','Film of The Year');
SQL> INSERT INTO awards VALUES ('Casablanca','Academy Award');
SQL> --
SQL> -- genre inserts
SQL> --
SQL> INSERT INTO genre VALUES ('The Wizard of Oz','fantasy');
SQL> INSERT INTO genre VALUES ('Citizen Kane','action');
SQL> INSERT INTO genre VALUES ('The Third Man','action');
SQL> INSERT INTO genre VALUES ('MM : Fury Road','action');
SQL> INSERT INTO genre VALUES ('All About Eve','romance');
SQL> INSERT INTO genre VALUES ('The Cabinet of Dr. Caligari','thriller');
SQL> INSERT INTO genre VALUES ('Inside Out','animation');
SQL> INSERT INTO genre VALUES ('The Godfather','action');
SQL> INSERT INTO genre VALUES ('Metropolis','suspense');
SQL> INSERT INTO genre VALUES ('Get Out','horror');
SQL> INSERT INTO genre VALUES ('Modern Times','suspense');
SQL> INSERT INTO genre VALUES ('E.T. The Extra-Terrestrial','fantasy');
SQL> INSERT INTO genre VALUES ('Singin in the Rain','romance');
SQL> INSERT INTO genre VALUES ('It Happened One Night','romance');
SQL> INSERT INTO genre VALUES ('Casablanca','romance');
SQL> INSERT INTO genre VALUES ('Animal House','comedy');
SQL> INSERT INTO genre VALUES ('Pineapple Express','comedy');
SQL> INSERT INTO genre VALUES ('Drillbit Taylor','comedy');
SQL> --
SQL> --
SQL> SET FEEDBACK ON
SQL> --
SQL> COMMIT;

Commit complete.

SQL> --
SQL> -- ------------------------------------------------------------------
SQL> -- Displaying Tables
SQL> -- ------------------------------------------------------------------
SQL> --
SQL> SELECT * FROM movie;
rows will be truncated

rows will be truncated

rows will be truncated


MOVIETITLE                                         CNAME
-------------------------------------------------- ------------------------------
The Wizard of Oz                                   JR Agencies
Citizen Kane                                       5-0 Management
The Third Man                                      5-0 Management
```

```
MM : Fury Road                                     LA Management
All About Eve                                      PW Management
The Cabinet of Dr. Caligari                        Blues Bros Management
Inside Out                                         JR Agencies
The Godfather                                      JR Agencies
Metropolis                                         EL Management
Get Out                                            PW Management
Modern Times                                       PW Management

MOVIETITLE                                         CNAME
-------------------------------------------------- -----------------------------
E.T. The Extra-Terrestrial                         Blues Bros Management
Singin in the Rain                                 PW Management
It Happened One Night                              PW Management
Casablanca                                         Blues Bros Management
Animal House                                       5-0 Management
Pineapple Express                                  HI GH Agencies
Drillbit Taylor                                    LA Management

18 rows selected.

SQL> SELECT * FROM person;
rows will be truncated

rows will be truncated
rows will be truncated


PERSONNAME                                         CNAME
-------------------------------------------------- -----------------------------
Will Smith                                         PW Management
John Smith                                         PW Management
Jason Momoa                                        JR Agencies
Emma Watson                                        PW Management
Abby Hall                                          JR Agencies
Seth Rogen                                         HI GH Agencies
James Franco                                       HI GH Agencies
Emily Jones                                        EL Management
George Mann                                        EL Management
John Belushi                                       Blues Bros Management
Kevin Bacon                                        5-0 Management

PERSONNAME                                         CNAME
-------------------------------------------------- -----------------------------
Casey Boersma                                      LA Management
Dylan Boersma                                      LA Management

13 rows selected.

SQL> SELECT * FROM production_company;
```

```
COMPANYNAME                                        YEARFOUNDED
-------------------------------------------------- -----------
PW Management                                             1923
JR Agencies                                               1928
HI GH Agencies                                            1997
EL Management                                             1935
Blues Bros Management                                     1912
5-0 Management                                            1986
LA Management                                             1912

7 rows selected.

SQL> SELECT * FROM distributor;
rows will be truncated


DISTRIBUTORNAME                                    DATEOFFOUN PRESIDENT
-------------------------------------------------- ---------- ------------------
Warner Bros. Pictures                              10/09/0095 Kevin Tsujihara
RKO Radio Pictures                                 01/24/0089 DEFUNCT
Rialto Pictures                                    03/12/0093 Bruce Goldstein
20th Century Fox                                   07/05/0082 Stacey Snider
Paramount Pictures                                 10/09/0095 Jim Gianopulos
Disney/Pixar                                       12/17/0077 Robert A. Iger
Universal Pictures                                 02/20/0088 Ronald Meyer
United Artists                                     08/24/0086 Mark Burnette
MGM                                                10/09/0095 Gary Barber
Sony Pictures Home Entertainment                   10/24/0003 Man Jit Singh

10 rows selected.

SQL> SELECT * FROM box_office;
truncating (as requested) before column OPENINGWEEKENDREVENUE

truncating (as requested) before column GROSSPROFIT


MTITLE                                             COSTOFPRODUCTIO ADMISSIONS
-------------------------------------------------- --------------- ----------
The Wizard of Oz                                   4897362            1235986
Citizen Kane                                       1235986            1286475
The Third Man                                      84927489          17854963
MM : Fury Road                                     1726374            1235986
All About Eve                                      1236453           17854963
The Cabinet of Dr. Caligari                        1829374            1596734
Inside Out                                         1726456           17854963
The Godfather                                      1829476           17854963
Metropolis                                         1728475            1235986
Get Out                                            1827465           17854963
```

```
Modern Times                                       1827475            1286475

MTITLE                                             COSTOFPRODUCTIO ADMISSIONS
-------------------------------------------------- --------------- ----------
E.T. The Extra-Terrestrial                         1728472           17854963
Singin in the Rain                                 1827462            1235986
It Happened One Night                              1829423            1596734
Casablanca                                         1829423            1286475
Animal House                                       3000000            1200341
Pineapple Express                                  27000000          14000000
Drillbit Taylor                                    40000000           5555555

18 rows selected.

SQL> SELECT * FROM awards;

MTITLE                                             MAWARD
-------------------------------------------------- ------------------------------
All About Eve                                      Academy Award
Casablanca                                         Academy Award
Citizen Kane                                       Academy Award
E.T. The Extra-Terrestrial                         Film of The Year
Get Out                                            Film of The Year
Inside Out                                         Academy Award
It Happened One Night                              Film of The Year
MM : Fury Road                                     Academy Award
Metropolis                                         Academy Award
Modern Times                                       Academy Award
Singin in the Rain                                 Academy Award

MTITLE                                             MAWARD
-------------------------------------------------- ------------------------------
The Cabinet of Dr. Caligari                        Film of The Year
The Godfather                                      Film of The Year
The Third Man                                      Film of The Year
The Wizard of Oz                                   Film of The Year

15 rows selected.

SQL> SELECT * FROM genre;

MTITLE                                             MGENRE
-------------------------------------------------- ------------------------------
All About Eve                                      romance
Animal House                                       comedy
Casablanca                                         romance
Citizen Kane                                       action
Drillbit Taylor                                    comedy
E.T. The Extra-Terrestrial                         fantasy
Get Out                                            horror
```

```
Inside Out                                         animation
It Happened One Night                              romance
MM : Fury Road                                     action
Metropolis                                         suspense

MTITLE                                             MGENRE
-------------------------------------------------- -----------------------------
Modern Times                                       suspense
Pineapple Express                                  comedy
Singin in the Rain                                 romance
The Cabinet of Dr. Caligari                        thriller
The Godfather                                      action
The Third Man                                      action
The Wizard of Oz                                   fantasy

18 rows selected.

SQL> SELECT * FROM works_on;
rows will be truncated

PERSONNAME                                         MOVIETITLE
-------------------------------------------------- -----------------------------
Will Smith                                         Modern Times
John Smith                                         It Happened One Night
Jason Momoa                                        Inside Out
Emma Watson                                        It Happened One Night
Abby Hall                                          Inside Out
Seth Rogen                                         Pineapple Express
James Franco                                       Pineapple Express
Emily Jones                                        Metropolis
George Mann                                        Metropolis
John Belushi                                       Casablanca
Kevin Bacon                                        The Third Man

PERSONNAME                                         MOVIETITLE
-------------------------------------------------- -----------------------------
Casey Boersma                                      Drillbit Taylor
Dylan Boersma                                      Drillbit Taylor

13 rows selected.

SQL> SELECT * FROM distributes;
rows will be truncated

rows will be truncated

rows will be truncated


DISTRIBUTORNAME                                    MOVIETITLE
```

```
-------------------------------------------------- ----------------------------
Warner Bros. Pictures                              The Wizard of Oz
RKO Radio Pictures                                 Citizen Kane
Rialto Pictures                                    The Third Man
20th Century Fox                                   MM : Fury Road
Paramount Pictures                                 All About Eve
Disney/Pixar                                       The Cabinet of Dr. Caligari
Universal Pictures                                 Inside Out
Universal Pictures                                 The Godfather
Sony Pictures Home Entertainment                   Pineapple Express
MGM                                                Drillbit Taylor

10 rows selected.

SQL> --
SQL> -- ------------------------------------------------------------------
SQL> -- Queries
SQL> -- ------------------------------------------------------------------
SQL> --
SQL> -- 1: Joining 4
SQL> -- Find the person's name/ company name, movie title and (movie's) gross profit
for any actor
SQL> -- that worked on a comedy film that grossed more than $50 mill
SQL> --
SQL> SELECT p.personName, m.movieTitle, b.grossProfit
  2  FROM Person p, Movie m, box_office b, works_on w, genre g
  3  WHERE p.personName = w.personName AND
  4          m.movieTitle = w.movieTitle AND b.mTitle = m.movieTitle AND g.mTitle =
m.movieTitle AND
  5          b.grossProfit > 50000000 AND
  6          w.primaryRole = 'actor' AND
  7          g.Mgenre LIKE '%comedy%';
rows will be truncated


PERSONNAME                                         MOVIETITLE
-------------------------------------------------- ----------------------------
James Franco                                       Pineapple Express
Seth Rogen                                         Pineapple Express

2 rows selected.

SQL> --
SQL> -- 2: Self Join
SQL> -- Find names of distributors who were founded at the same time that also share
the same founder.
SQL> --
SQL> SELECT DISTINCT d1.distributorName
  2   FROM distributor d1, distributor d2
  3   WHERE d1.distributorName <> d2.distributorName AND
  4         d1.founder = d2.founder AND
  5         d1.dateOfFounding = d2.dateOfFounding;

DISTRIBUTORNAME
--------------------------------------------------
Paramount Pictures
Warner Bros. Pictures
MGM

3 rows selected.

SQL> --
SQL> -- 3: Union/Intersection/Minus
SQL> -- < Select all of the action movies with a rating greater than 3 >
SQL> --
SQL> SELECT m.movieTitle, g.mGenre, m.rating
  2  FROM movie m, genre g
  3  WHERE m.rating > 3
  4  INTERSECT
  5  SELECT g.mTitle, g.mGenre, m.rating
  6  FROM genre g, movie m
  7  WHERE g.mGenre LIKE '%action%';
rows will be truncated

MOVIETITLE                                         MGENRE
-------------------------------------------------- -----------------------------
Citizen Kane                                       action
MM : Fury Road                                     action
The Third Man                                      action

3 rows selected.

SQL> --
SQL> -- 4: SUM/AVG/MAX/MIN
SQL> -- < Select the movie title, cost of production and gross profit, and
SQL> --   awards for all movies that have earned awards, with ratings greater than 3,
SQL> --   and whose gross profit is greater than the average gross profit >
SQL> --
SQL> SELECT distinct b.mTitle, b.costOfProduction, b.grossProfit, a.mAward
  2  FROM   box_office b, awards a
  3  WHERE  b.mTitle = a.mTitle AND
  4        b.grossProfit >
  5         (SELECT AVG (b.grossProfit)
  6          FROM box_office b, awards a, movie m
  7          WHERE a.mAward IS NOT NULL AND
  8          m.rating > 3)
  9  ORDER BY b.mTitle;
```

```
MTITLE                                             COSTOFPRODUCTIO GROSSPROFIT M
-------------------------------------------------- --------------- ----------- -
Casablanca                                         1829423           563254100 A
Citizen Kane                                       1235986           547862354 A
E.T. The Extra-Terrestrial                         1728472           632541258 F
Inside Out                                         1726456           954723612 A
Modern Times                                       1827475           458756325 A
The Cabinet of Dr. Caligari                        1829374           542376854 F
The Wizard of Oz                                   4897362           985634587 F

7 rows selected.

SQL> --
SQL> -- 5: GROUP BY, HAVING, ORDER BY
SQL> -- < Find the average duration of movies with a rating of 3, 4, and 5 >
SQL> SELECT rating, AVG (duration)
  2    FROM movie
  3    GROUP BY rating
  4    HAVING COUNT (rating) > 2
  5    ORDER BY AVG (rating);

    RATING AVG(DURATION)
---------- -------------
         3         118.4
         4            98
         5        109.75

3 rows selected.

SQL> --
SQL> --
SQL> -- 6: Correlated Subquery
SQL> -- Find the title, gross profit, and genre of the highest grossing films of each
genre.
SQL> --
SQL> SELECT b1.mTitle, b1.grossProfit, g1.mGenre
  2  FROM   box_office b1, genre g1
  3  WHERE g1.mTitle = b1.mTitle AND
  4          b1.grossProfit =
  5      (SELECT MAX(b2.grossProfit)
  6       FROM box_office b2, genre g2
  7       WHERE g1.mGenre LIKE g2.mGenre AND
  8            b2.mTitle = g2.mTitle)
  9  ORDER BY b1.mTitle;

MTITLE                                             GROSSPROFIT MGENRE
-------------------------------------------------- ----------- -----------------
Animal House                                         141600000 comedy
Casablanca                                           563254100 romance
```

```
Citizen Kane                                         547862354 action
Get Out                                              236521452 horror
Inside Out                                           954723612 animation
Modern Times                                         458756325 suspense
The Cabinet of Dr. Caligari                          542376854 thriller
The Wizard of Oz                                     985634587 fantasy

8 rows selected.

SQL> --
SQL> -- 7: Non-correlated Subquery
SQL> -- < Finds every movie that wasn't distributed in the United States >
SQL> --
SQL> SELECT M.movieTitle
  2    FROM distributes M
  3    WHERE M.country NOT IN (SELECT N.country
  4                            FROM distributes N
  5                            WHERE N.country = 'United States');

MOVIETITLE
--------------------------------------------------
Citizen Kane
The Cabinet of Dr. Caligari
The Godfather
MM : Fury Road

4 rows selected.

SQL> --
SQL> -- 8: A Relational DIVISION query
SQL> -- < Finds the title of every movie that has a rating of 5 and
SQL> --   was not produced by Warner Bros. Pictures >
SQL> --
SQL> SELECT M.movieTitle
  2    FROM movie M
  3    WHERE M.movieTitle = ((SELECT N.movieTitle
  4                   FROM movie N
  5                   WHERE N.rating = 5 AND
  6                         N.movieTitle = M.movieTitle)
  7                  MINUS
  8                  (SELECT N.movieTitle
  9                   FROM movie N
 10                   WHERE N.cName = 'Warner Bros. Pictures'));

MOVIETITLE
--------------------------------------------------
All About Eve
Animal House
Drillbit Taylor
MM : Fury Road
```

```
Modern Times
Pineapple Express
The Third Man
The Wizard of Oz

8 rows selected.

SQL> --
SQL> -- 9: Outer Join
SQL> -- < Finds the title, rating, and gross profit of every movie >
SQL> --
SQL> SELECT M.movieTitle, M.rating, B.grossProfit
  2    FROM movie M LEFT OUTER JOIN box_office B ON M.movieTitle = B.mTitle;

MOVIETITLE                                             RATING GROSSPROFIT
-------------------------------------------------- ---------- -----------
The Wizard of Oz                                            5   985634587
Citizen Kane                                                4   547862354
The Third Man                                               5   234658971
MM : Fury Road                                              5   127653892
All About Eve                                               5   234856975
The Cabinet of Dr. Caligari                                 4   542376854
Inside Out                                                  3   954723612
The Godfather                                               3   124578965
Metropolis                                                  4   325412578
Get Out                                                     3   236521452
Modern Times                                                5   458756325

MOVIETITLE                                             RATING GROSSPROFIT
-------------------------------------------------- ---------- -----------
E.T. The Extra-Terrestrial                                  3   632541258
Singin in the Rain                                          4   147896321
It Happened One Night                                       3   258967413
Casablanca                                                  4   563254100
Animal House                                                5   141600000
Pineapple Express                                           5    87341380
Drillbit Taylor                                             5    32853640

18 rows selected.

SQL> --
SQL> -- 10: RANK
SQL> -- Returns the titles and ranks the gross profits of the movies in the 'action'
genre,
SQL> -- ordered by highest grossing to lowest, and (rank)1 = highest grossing.
SQL> --
SQL> SELECT b.mTitle, b.grossProfit,
  2  RANK() OVER (PARTITION BY g.mgenre ORDER BY b.grossProfit DESC)
  3  FROM box_office b, genre g
  4  WHERE b.mtitle = g.mtitle AND
  5       g.mgenre LIKE '%action%';
truncating (as requested) before column
RANK()OVER(PARTITIONBYG.MGENREORDERBYB.GROSSPROFITDESC)


MTITLE                                             GROSSPROFIT
-------------------------------------------------- -----------
Citizen Kane                                         547862354
The Third Man                                        234658971
MM : Fury Road                                       127653892
The Godfather                                        124578965

4 rows selected.

SQL> --
SQL> -- 11: Top-N
SQL> -- Finds the title, cost of production, and gross profit of the 5 highest
grossing movies.
SQL> --
SQL> SELECT  mtitle, costOfProduction, grossProfit
  2  FROM   (SELECT * FROM box_office ORDER BY grossProfit DESC)
  3  WHERE   ROWNUM < 6;

MTITLE                                             COSTOFPRODUCTIO GROSSPROFIT
-------------------------------------------------- --------------- -----------
The Wizard of Oz                                   4897362           985634587
Inside Out                                         1726456           954723612
E.T. The Extra-Terrestrial                         1728472           632541258
Casablanca                                         1829423           563254100
Citizen Kane                                       1235986           547862354

5 rows selected.

SQL> --
SQL> --
SQL> --Test constraint di1 (On delete cascade in the distributes table)
SQL> SELECT  d.distributorName
  2  FROM distributes d;

DISTRIBUTORNAME
--------------------------------------------------
20th Century Fox
Disney/Pixar
MGM
Paramount Pictures
RKO Radio Pictures
Rialto Pictures
Sony Pictures Home Entertainment
Universal Pictures
Universal Pictures
```

```
Warner Bros. Pictures

10 rows selected.

SQL>
SQL> DELETE
  2  FROM distributor
  3  WHERE distributorName = 'Warner Bros. Pictures';

1 row deleted.

SQL>
SQL> SELECT d.distributorName
  2  FROM distributes d;

DISTRIBUTORNAME
--------------------------------------------------
20th Century Fox
Disney/Pixar
MGM
Paramount Pictures
RKO Radio Pictures
Rialto Pictures
Sony Pictures Home Entertainment
Universal Pictures
Universal Pictures

9 rows selected.

SQL> --
SQL> --
--------------------------------------------------------------------------------------
-------
SQL> -- Integrity Constraint Checks
SQL> --
--------------------------------------------------------------------------------------
-------
SQL> --
SQL> -- testing (mICKEY)
SQL> INSERT INTO movie VALUES ('The Wizard of Oz', '5-0 Management', '101',5 , 2);
INSERT INTO movie VALUES ('The Wizard of Oz', '5-0 Management', '101',5 , 2)
*
ERROR at line 1:
ORA-00001: unique constraint (LINDENBN.SYS_C00377211) violated


SQL> --
SQL> -- testing (dil)
SQL> DELETE FROM distributor WHERE distributorName = '20th Century Fox';
```

```
1 row deleted.

SQL> SELECT distributorName FROM distributes;

DISTRIBUTORNAME
--------------------------------------------------
Disney/Pixar
MGM
Paramount Pictures
RKO Radio Pictures
Rialto Pictures
Sony Pictures Home Entertainment
Universal Pictures
Universal Pictures

8 rows selected.

SQL> SELECT distributorName FROM distributor;

DISTRIBUTORNAME
--------------------------------------------------
Disney/Pixar
MGM
Paramount Pictures
RKO Radio Pictures
Rialto Pictures
Sony Pictures Home Entertainment
United Artists
Universal Pictures

8 rows selected.

SQL> --
SQL> -- testing (mIC2)
SQL> INSERT INTO movie VALUES ('Into The Wild', 'JR Agencies', '103', 7, 3);
INSERT INTO movie VALUES ('Into The Wild', 'JR Agencies', '103', 7, 3)
*
ERROR at line 1:
ORA-02290: check constraint (LINDENBN.MIC2) violated
SQL> --
SQL> -- testing (mIC3)
SQL> INSERT INTO movie VALUES ('Into The Wild', 'JR Agencies', '103', 5, 0);
INSERT INTO movie VALUES ('Into The Wild', 'JR Agencies', '103', 5, 0)
*
ERROR at line 1:
ORA-02290: check constraint (LINDENBN.MIC3) violated
SQL> --
SQL> COMMIT;
Commit complete.
SQL> SPOOL OFF
```