Instructions:

Use the ‘*Tiny Video’* SQL script file found below

Paste the contents of this script into a query tab of MySQL Workbench and execute it. This will create the schema named *tiny\_video* and populate it for you. After running the script, you no longer need it.

Using MySQL SELECT commands answer the questions listed below using the *tiny\_video* schema. Read each question carefully!

Copy/paste your SQL query, and the output for each problem, into the document and submit

Assignment Details:

1. (1 point) Using MySQL Workbench, reverse engineer the *tiny\_video* schema to create the ERD. Add a text box to display your name within the ERD. Include a screenshot of your results here. This ERD is useful to help you determine which tables to use for the remainder of the assignment.

1. (4 points) Determine your startup investment:  write a query to return title, year\_released, cost, genre, copies and purchase\_price. The results should be sorted by the purchase date from newest to oldest.

1. (4 points) Inventory considerations: write a query to display video id, title, cost and rental id. Only display videos that were never rented or never returned from their prior rental.

1. (5 points) Write a query to display membership name (concatenate the first name and last name with a space between them into a single column) called member\_name. Add two additional columns:

* 1. rental\_count: to display how many times each member has rented
  2. videos\_rented: to display the number of videos each member has rented

1. (5 points) Write a query to display membership id, first name and last name for any member who has no rental history.

1. (6 points) Using a subquery, write a query to display membership id, first name and last name for any member who has rented multiple times. Does this match your results from Question 4?

Script is below

/\* Database Systems, 9th Ed., Coronel/MOrris/Rob \*/

/\* Type of SQL : MySQL \*/

CREATE SCHEMA IF NOT EXISTS TINY\_VIDEO;

USE TINY\_VIDEO;

DROP TABLE IF EXISTS detail\_rental;

DROP TABLE IF EXISTS rental;

DROP TABLE IF EXISTS membership;

DROP TABLE IF EXISTS video;

DROP TABLE IF EXISTS movie;

DROP TABLE IF EXISTS price;

/\*Create table price\*/

CREATE TABLE price

(price\_id INTEGER PRIMARY KEY AUTO\_INCREMENT,

description VARCHAR(20) NOT NULL,

rental\_fee DECIMAL(5,2),

daily\_late\_fee DECIMAL(5,2));

/\*Insert data into price\*/

INSERT INTO price VALUES(1,'Standard',2.5,1);

INSERT INTO price VALUES(2,'New Release',4.0,3);

INSERT INTO price VALUES(3,'Discount',2.0,1);

INSERT INTO price VALUES(4,'Weekly Special',1.5,.5);

/\*Create table movie\*/

CREATE TABLE movie

(movie\_id INTEGER PRIMARY KEY AUTO\_INCREMENT,

title VARCHAR(75) NOT NULL,

year\_released INTEGER,

cost DECIMAL(5,2),

genre VARCHAR(50),

price\_id INTEGER,

FOREIGN KEY(price\_id) REFERENCES price(price\_id));

/\*Insert data into movie\*/

INSERT INTO movie VALUES(1234,'The Cesar Family Christmas',2007,39.95,'FAMILY',2);

INSERT INTO movie VALUES(1235,'Smokey Mountain Wildlife',2004,59.95,'ACTION',3);

INSERT INTO movie VALUES(1236,'Richard Goodhope',2008,59.95,'DRAMA',2);

INSERT INTO movie VALUES(1237,'Beatnik Fever',2007,29.95,'COMEDY',2);

INSERT INTO movie VALUES(1238,'Constant Companion',2008,89.95,'DRAMA',NULL);

INSERT INTO movie VALUES(1239,'Where Hope Dies',1998,25.49,'DRAMA',3);

INSERT INTO movie VALUES(1245,'Time to Burn',2006,45.49,'ACTION',3);

INSERT INTO movie VALUES(1246,'What He Doesn''t Know',2006,58.29,'COMEDY',1);

/\*Create table video\*/

CREATE TABLE video

(video\_id INTEGER PRIMARY KEY AUTO\_INCREMENT,

purchase\_date DATE,

movie\_id INTEGER,

FOREIGN KEY(movie\_id) REFERENCES movie(movie\_id));

/\*Insert data into video\*/

INSERT INTO video VALUES(54321,'2008-06-18',1234);

INSERT INTO video VALUES(54324,'2008-06-18',1234);

INSERT INTO video VALUES(54325,'2008-06-18',1234);

INSERT INTO video VALUES(34341,'2007-01-22',1235);

INSERT INTO video VALUES(34342,'2007-01-22',1235);

INSERT INTO video VALUES(34366,'2009-03-02',1236);

INSERT INTO video VALUES(34367,'2009-03-02',1236);

INSERT INTO video VALUES(34368,'2009-03-02',1236);

INSERT INTO video VALUES(34369,'2009-03-02',1236);

INSERT INTO video VALUES(44392,'2008-10-21',1237);

INSERT INTO video VALUES(44397,'2008-10-21',1237);

INSERT INTO video VALUES(59237,'2009-02-14',1237);

INSERT INTO video VALUES(61388,'2007-01-25',1239);

INSERT INTO video VALUES(61353,'2006-01-28',1245);

INSERT INTO video VALUES(61354,'2006-01-28',1245);

INSERT INTO video VALUES(61367,'2008-07-30',1246);

INSERT INTO video VALUES(61369,'2008-07-30',1246);

/\*Create table membership\*/

CREATE TABLE membership

(membership\_id INTEGER PRIMARY KEY AUTO\_INCREMENT,

first\_name VARCHAR(30) NOT NULL,

last\_name VARCHAR(30) NOT NULL,

street VARCHAR(120),

city VARCHAR(50),

state VARCHAR(2),

zip VARCHAR(5),

balance DECIMAL(10,2));

/\*Insert data into membership\*/

INSERT INTO membership VALUES(102,'Tami','Dawson','2632 Takli Circle','Norene','TN','37136',11);

INSERT INTO membership VALUES(103,'Curt','Knight','4025 Cornell Court','Flatgap','KY','41219',6);

INSERT INTO membership VALUES(104,'Jamal','Melendez','788 East 145th Avenue','Quebeck','TN','38579',0);

INSERT INTO membership VALUES(105,'Iva','Mcclain','6045 Musket Ball Circle','Summit','KY','42783',15);

INSERT INTO membership VALUES(106,'Miranda','Parks','4469 Maxwell Place','Germantown','TN','38183',0);

INSERT INTO membership VALUES(107,'Rosario','Elliott','7578 Danner Avenue','Columbia','TN','38402',5);

INSERT INTO membership VALUES(108,'Mattie','Guy','4390 Evergreen Street','Lily','KY','40740',0);

INSERT INTO membership VALUES(109,'Clint','Ochoa','1711 Elm Street','Greenville','TN','37745',10);

INSERT INTO membership VALUES(110,'Lewis','Rosales','4524 Southwind Circle','Counce','TN','38326',0);

INSERT INTO membership VALUES(111,'Stacy','Mann','2789 East Cook Avenue','Murfreesboro','TN','37132',8);

INSERT INTO membership VALUES(112,'Luis','Trujillo','7267 Melvin Avenue','Heiskell','TN','37754',3);

INSERT INTO membership VALUES(113,'Minnie','Gonzales','124 6th Street West','Williston','ND','58801',0);

/\*Create table rental\*/

CREATE TABLE rental

(rental\_id INTEGER PRIMARY KEY AUTO\_INCREMENT,

rental\_date DATE,

membership\_id INTEGER,

FOREIGN KEY(membership\_id) REFERENCES membership(membership\_id));

/\*Insert data into rental\*/

INSERT INTO rental VALUES(1001,'2009-03-01',103);

INSERT INTO rental VALUES(1002,'2009-03-01',105);

INSERT INTO rental VALUES(1003,'2009-03-02',102);

INSERT INTO rental VALUES(1004,'2009-03-02',110);

INSERT INTO rental VALUES(1005,'2009-03-02',111);

INSERT INTO rental VALUES(1006,'2009-03-02',107);

INSERT INTO rental VALUES(1007,'2009-03-02',104);

INSERT INTO rental VALUES(1008,'2009-03-03',105);

INSERT INTO rental VALUES(1009,'2009-03-03',111);

/\*Create table detailrental\*/

CREATE TABLE detail\_rental

(rental\_id INTEGER,

video\_id INTEGER,

fee DECIMAL(5,2),

due\_date DATE,

return\_date DATE,

daily\_late\_fee DECIMAL(5,2),

PRIMARY KEY(rental\_id, video\_id),

FOREIGN KEY(rental\_id) REFERENCES rental(rental\_id),

FOREIGN KEY(video\_id) REFERENCES video(video\_id));

/\*Insert data into dailyrental\*/

INSERT INTO detail\_rental VALUES(1001,34342,2,'2009-03-04','2009-03-02',1);

INSERT INTO detail\_rental VALUES(1001,61353,2,'2009-03-04','2009-03-03',1);

INSERT INTO detail\_rental VALUES(1002,59237,3.5,'2009-03-04','2009-03-04',3);

INSERT INTO detail\_rental VALUES(1003,54325,3.5,'2009-03-04','2009-03-09',3);

INSERT INTO detail\_rental VALUES(1003,61369,2,'2009-03-06','2009-03-09',1);

INSERT INTO detail\_rental VALUES(1003,61388,0,'2009-03-06','2009-03-09',1);

INSERT INTO detail\_rental VALUES(1004,44392,3.5,'2009-03-05','2009-03-07',3);

INSERT INTO detail\_rental VALUES(1004,34367,3.5,'2009-03-05','2009-03-07',3);

INSERT INTO detail\_rental VALUES(1004,34341,2,'2009-03-07','2009-03-07',1);

INSERT INTO detail\_rental VALUES(1005,34342,2,'2009-03-07','2009-03-05',1);

INSERT INTO detail\_rental VALUES(1005,44397,3.5,'2009-03-05','2009-03-05',3);

INSERT INTO detail\_rental VALUES(1006,34366,3.5,'2009-03-05','2009-03-04',3);

INSERT INTO detail\_rental VALUES(1006,61367,2,'2009-03-07',NULL,1);

INSERT INTO detail\_rental VALUES(1007,34368,3.5,'2009-03-05',NULL,3);

INSERT INTO detail\_rental VALUES(1008,34369,3.5,'2009-03-05','2009-03-05',3);

INSERT INTO detail\_rental VALUES(1009,54324,3.5,'2009-03-05',NULL,3);

INSERT INTO detail\_rental VALUES(1001,34366,3.5,'2009-03-04','2009-03-02',3);