

HW#06	 <b>Golisano</b> College of Computing and Information Sciences <b>School of Information</b>	Spring 2023 (2225)
-------	---	-----------------------

Homework 6

**Due Date (See MyCourses ASSIGNMENTS)**

**Assignment Box HW06**

Name: \_\_\_\_\_ (Lastname, Firstname)

## Inner Joins, Outer Joins, and Subqueries

### Use SCRIPT CreateBook.sql

Note: submissions must be made to the appropriate Assignment / dropbox.

**You must have many source code comments like the following**

-- Lastname, Firstname

-- HW# 06

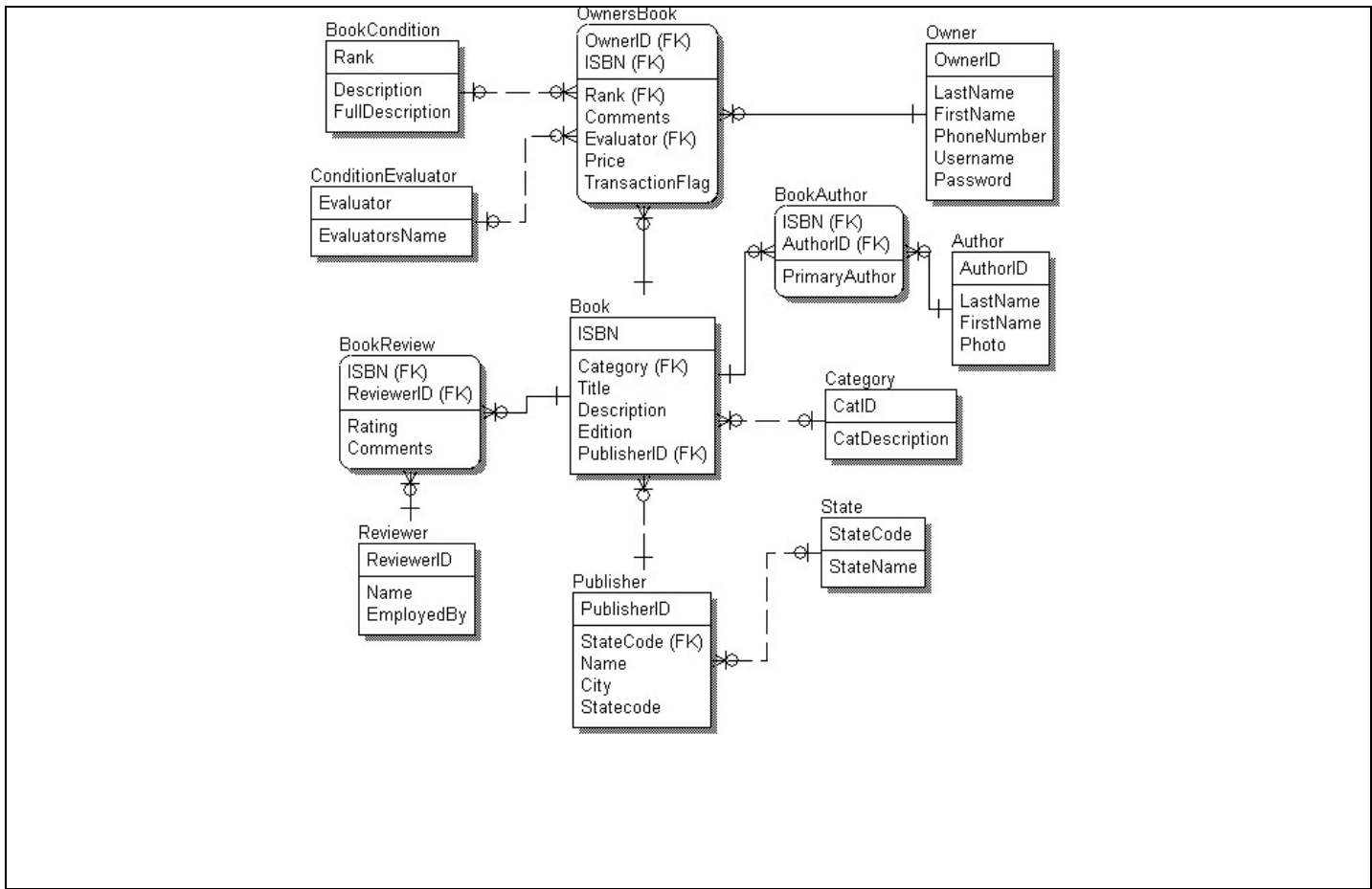
-- Current Date

-- Professor: Habermas, James

-- TEE file with comments above every question, Script file with comments above every question just like the following

-- Question 1 - GOAL: SQL statement that will show the title for each book and its category description

ERWin model of Book Trading database (foreign keys included for your convenience).



## Homework #06

In this homework, the Universe of Discourse is a portion of a (hypothetical) Book Trading database, used to capture information about books that are owned and traded among college students in IT. Captured in English, the entities of this Universe of Discourse, and the relationships among them, can be described like this:

- Book** .. (1) identified by an **ISBN**, (2) written by one primary **BookAuthor** and zero or more secondary **BookAuthors**, (3) categorized by subject matter **Category**, (4) published by **Publisher**, and (5) reviewed in a given **BookReview**
- BookAuthor** .. individuals that are either the primary or secondary author(s) of a specific **Book** occurrence
- Author** .. individuals that are primary or secondary authors
- BookReview** .. the rating assigned to a specific **Book** occurrence by a given **Reviewer**
- Reviewer** .. individuals that review **Books** and assign a rating to it
- OwnersBook** .. **Books** *owned* by **Owners** that are deemed to be in a certain **Condition** as rated by a **ConditionEvaluator**
- Owners** .. individuals that *own* **OwnersBooks**

## Homework #06

<b>Condition</b>	.. the set of <b>Condition</b> “rankings” (1..5, corresponding to “bad”, “poor”, “average”, “good” and “excellent”) that can be assigned to an <b>OwnersBook</b>
<b>ConditionEvaluator</b>	.. individuals that evaluate the condition of a book and assign a <b>Condition</b> to it
<b>Category</b>	... the set of <b>BOOK</b> subject matter classifications
<b>Publisher</b>	.. publishes <b>BOOKs</b> in a given U.S. <b>State</b>
<b>State</b>	.. state codes and full state names

### Download and install the book database

In MyCourses you will find a script called createBOOK.sql, download the file to your local hard drive. Run the 'createBOOK.sql' script within MySQL to create the BOOK database.

### Query the database

For each of the tasks that follow you will write a SQL statement that will answer the question given the specifications provided. The results you should achieve are shown after each task (unless a sort order is specified, if your records appear in a different order but the content is the same, that is fine).

The SQL statements all of the queries **must** be placed in one script file named ***yourlastnameH6.sql*** with a comment before your statements to indicate the query, for example "`-- Query 1`". Put the course number, your name and Homework 6 in comments at the top of the script file.

Create a tee file named ***yourLastnameH6.txt*** Make sure you have your name and section as a comment at the top of this tee file. With the verbose option on, execute your script named ***yourlastnameH6.sql*** Your tee file should show each command you created and the results of that command.

Do not use a zip file when turning in this project. Turn in your script and your tee file in the Homework drop box #6.

1. Write a SQL statement that will show the title for each book and its category description (sports, romance, etc). Sort the results first by category description in descending order, followed by title in ascending order.

title	catdescription
The Shortest Book in the World	Sports
Yes! Networking is for Bills Fans	Sports
Calculus for Phys Ed Majors	Science
I Lasted my Love's Last Lingering Longing	Romance
My Lost Love's Long Last Lingering	Romance
My Love's at Long Last Lost his Lingering	Romance
My Love's Last Lingering Lost	Romance
My Love's Last Longing	Romance
Women are From Venus ORACLE is from Beyond Pluto	Romance

A language without Pointers? Priceless.	Programming
How to add Class to your Programming	Programming
JAVA: It's more than Just a Programming Language	Programming
How to Keep your Cable Bill Down	Networking
How to Keep your Cellular Bill Down	Networking
Tired of wired? Infrared instead!	Networking
The Science of Literature Searching	Library Science
From Brockport to IT	Geography
From Deep in the Heart of Texas to IT	Geography
From the Shores of Lake Erie to IT	Geography
ER, SOM, NF, DK/NF, SQL, JDBC, ODBC, and RELVAR	Database
Master C++ Through The Classic Comics	Comics
Master HTML Through The Classic Comics	Comics
Master Wireless Through The Classic Comics	Comics

23 rows in set (0.38 sec)

## Homework #06

2. List the book titles and their ratings for all reviewers who do *not* work for a newspaper or any other news organization. A reviewer is employed by a newspaper, or other news organization, if their “Employed By” field contains a value.

```
+-----+-----+-----+
| name  | title                                     | rating |
+-----+-----+-----+
| Leone | How to Keep your Cellular Bill Down      | 7      |
| Leone | How to Keep your Cable Bill Down         | 7      |
| Leone | From Deep in the Heart of Texas to IT    | 6      |
+-----+-----+-----+
3 rows in set (0.23 sec)
```

## Homework #06

3. For each book, show the title and the lastname and firstname for the author(s) of the book. The results should be sorted by book title in A-Z order, followed by author lastname in A-Z order.

title	lastname	firstname
A language without Pointers? Priceless.	Axelrod	Mike
A language without Pointers? Priceless.	Bierre	Kevin
Calculus for Phys Ed Majors	Garrison	Dan
Calculus for Phys Ed Majors	Hartpence	Bruce
Calculus for Phys Ed Majors	Troell	Luther
ER, SOM, NF, DK/NF, SQL, JDBC, ODBC, and RELVAR	Stratton	Bill
From Brockport to IT	Johnson	Daryl
From Deep in the Heart of Texas to IT	Troell	Luther
From the Shores of Lake Erie to IT	Stratton	Bill
How to add Class to your Programming	Kang	Jai
How to add Class to your Programming	Niemi	Rayno
How to Keep your Cable Bill Down	Hartpence	Bruce
How to Keep your Cellular Bill Down	Hartpence	Bruce
I Lasted my Love's Last Lingering Longing	Heartthrob	Danielle
JAVA: It's more than Just a Programming Language	Sonstein	Jeff
Master C++ Through The Classic Comics	Machogeek	Hero
Master C++ Through The Classic Comics	Webguy	Smerdley
Master HTML Through The Classic Comics	Machogeek	Hero
Master HTML Through The Classic Comics	Webguy	Smerdley
Master Wireless Through The Classic Comics	Hartpence	Bruce
My Lost Love's Long Last Lingering	Heartthrob	Danielle
My Love's at Long Last Lost his Lingering	Heartthrob	Danielle
My Love's Last Lingering Lost	Heartthrob	Danielle
My Love's Last Longing	Heartthrob	Danielle
The Science of Literature Searching	Henderson	Tona
The Science of Literature Searching	Lawley	Elizabeth
The Shortest Book in the World	Phelps	Andrew
Tired of wired? Infrared instead!	Hartpence	Bruce
Women are From Venus ORACLE is from Beyond Pluto	Weeden	Elissa
Yes! Networking is for Bills Fans	Leone	James
Yes! Networking is for Bills Fans	Lutz	Peter
Yes! Networking is for Bills Fans	Phelps	Andrew

32 rows in set (0.00 sec)

4. What are the titles, author's names, and prices for pre-owned books that are priced at \$50.00 or below? Results should be sorted by price in descending order, followed by title in A-Z order.

title	lastname	firstname	price
-------	----------	-----------	-------

## Homework #06

ER, SOM, NF, DK/NF, SQL, JDBC, ODBC, and RELVAR	Stratton	Bill	50.00
My Love's Last Longing	Heartthrob	Danielle	50.00
How to Keep your Cable Bill Down	Hartpence	Bruce	45.00
Yes! Networking is for Bills Fans	Phelps	Andrew	40.00
Yes! Networking is for Bills Fans	Leone	James	40.00
Yes! Networking is for Bills Fans	Lutz	Peter	40.00
The Shortest Book in the World	Phelps	Andrew	35.00
How to Keep your Cellular Bill Down	Hartpence	Bruce	25.00
My Lost Love's Long Last Lingering	Heartthrob	Danielle	25.00
From the Shores of Lake Erie to IT	Stratton	Bill	0.00

10 rows in set (0.02 sec)

5. Show the titles of ALL books and if the book had a reviewer show the name of the reviewer(s).

title	name
Women are From Venus ORACLE is from Beyond Pluto	Phelps
Calculus for Phys Ed Majors	NULL
My Love's Last Longing	Heartthrob
From the Shores of Lake Erie to IT	Yacci
My Love's Last Lingering Lost	Troell
My Love's Last Lingering Lost	Phelps
The Science of Literature Searching	NULL
Yes! Networking is for Bills Fans	Kurtz
Yes! Networking is for Bills Fans	Whittington
Yes! Networking is for Bills Fans	Stratton
How to Keep your Cellular Bill Down	Leone
How to Keep your Cellular Bill Down	Whittington
Tired of wired? Infrared instead!	NULL
ER, SOM, NF, DK/NF, SQL, JDBC, ODBC, and RELVAR	Bills
Master Wireless Through The Classic Comics	NULL
How to Keep your Cable Bill Down	Leone
I Lasted my Love's Last Lingering Longing	Weeden
From Deep in the Heart of Texas to IT	Leone
My Lost Love's Long Last Lingering	Stratton
From Brockport to IT	Yacci
From Brockport to IT	Perez-Hardy
Master HTML Through The Classic Comics	NULL
The Shortest Book in the World	Kurtz
The Shortest Book in the World	Stratton
My Love's at Long Last Lost his Lingering	Weeden
How to add Class to your Programming	McVea
Master C++ Through The Classic Comics	NULL
A language without Pointers? Priceless.	NULL
JAVA: It's more than Just a Programming Language	Whittington

29 rows in set (0.00 sec)

## Homework #06

6. Write a subquery that will display the ISBN and title of book that have a category that starts with the letter 'S'.

```
+-----+-----+
| isbn          | title                                     |
+-----+-----+
| 1-222-32443-7 | Calculus for Phys Ed Majors           |
| 2-089-77869-5 | Yes! Networking is for Bills Fans     |
| 8-330-69586-6 | The Shortest Book in the World        |
+-----+-----+
3 rows in set (0.02 sec)
```