Assignment 1

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Introduction to Database and the Relational Model

* Read chapter 1 that introduces you to client-server and web-based systems, the relational data model that organizes data into related tables, and to SQL the language used to search and update relational table data.
* Install Bitnami WAMP or MAMP bundle. This give you Apache web server, Php and MySQL.
* Install MySQL Workbench.
* Install sample databases by going to [www.murach.com](http://www.murach.com) and downloading the zip file that accompanies “murch’s mysql edition 2”. Unzip. Open the sql script create\_databases.sql and execute it using MySQL Workbench. This will create sample databases “ap”, “ex” and “om”.
* Read chapter 2 to familarize yourself with MySQL Workbench

Answer the following questions from chapter 1 and upload either a Word docx or PDF file with your answers to Assignment 1.

1. Describe briefly the different systems involved in a simple web-based system?
2. Explain the terms **relation (also called table)**, **tuple (also called row)** and **attribute (also called column)**.
3. Give an example of a relational table with a primary key (other than the examples in the textbook).
4. What is a **foreign key**? Give an example of a table with a foreign key (other than examples in the textbook).
5. An **auto generated key** is sometimes referred to as a **surrogate key**? Under what circumstances would you use one?
6. Explain three possible usages of a null value.
7. What are DML statements and how are they different from DDL statements?