Lab 2: Accessing Data (5% of total grade)

Submission: Use the included .sql file to put your answers in, then upload only the SQL file to Blackboard (Assessments > Lab 2 - Access Data).

Name your file: HTTP5126-L2-AccessData-*LastNameFirstName*.sql, replace *LastNameFirstName* with your name as displayed in Blackboard.

Purpose: To implement query construction techniques learned in Lesson 2 in order to answer "human" questions.

Requirements: For this lab, you will use the provided Pet Store data tables.

To put ourselves in a "real world" mindset for bridging the Human -- Computer gap, we will pretend that you are a database administrator for a pet store. The queries that you create will answer questions posed to you by your "employer" and "colleagues".

NOTE: Run your queries on your database to make sure they are providing the desired result set before submitting them as answers in your .sql file.

Pre-Lab:

1. Open XAMPP Control Panel, start Apache server and MySQL, then open your local host server in a browser and navigate to phpMyAdmin or Adminer.
2. Create a fresh database and identify it to lab 2 in some way. (eg. **http5126_lab2**). Set the collation as **utf8_unicode_ci**.
3. Select the DB and select **import,** select the file **'pet_store_tables.sql'** and click 'import' then 'execute'. This should create 2 tables in your database (***employee*** & ***stock_item***) which will be used for the queries you create below.

Part 1: Getting to Know Your Data (1%)

Start off by familiarizing yourself with your data tables.

A. Create a query that will return all of the data in your employee table.
B. Create a query that will return all of the data in your stock_item table.

Part 2: Limiting Your Columns (1%)

A. The assistant manager needs a list of products and their prices. Create a query that provides just the item and price columns for all stock_items.
B. The manager wants to create a contact list to post in the staff room. Create a query that provides the first name, last name, role and phone number for all employees.

Part 3: Customizing Your Columns (1%)

A. The assistant manager is doing a stock check to evaluate the balance of items by category in the store. Create a query that provides just the item column (with a heading of: “Product”), and the category column (with the heading of: “Animal”) for all stock_items.
B. The accountant needs a list of employees and pertinent data to create tax forms. Create a query that returns the last name of all employees (with a heading of “Pet Store Staff”); their employee identification numbers (with a heading of “Emp. ID”); and their SIN (with a heading of “SIN”).

Part 4: Limiting Your Rows (1%)

A. The manager needs to find someone to work this weekend. Create a query that provides the first names and phone numbers for all employees with the role of “Sales”.
B. The manager needs to know what items need to be reordered. Create a query that returns the name, id, and current inventory of all stock_items that have a dozen or fewer remaining in stock.

Part 5: Extra Challenge: Computer <==> Human (1%)

Write a query that answers each of the following “human” questions:

A. What “Kitty Cat” items do you sell and how much are they? (HINT: “Kitty Cat” should be the label on the column of items.)
B. What “Staff Member” is ID #115? (HINT: Output should be 1 column, 1 row. The cell should be a combination of data from 2 columns)