

## Lab 5: Data from Multiple Tables (8% of total grade)

**Submission:** Use the included .sql file to put your answers in, then upload only the SQL file to Blackboard (Assessments > Lab 5 - Multiple Tables).

**Name your file:** **HTTP5126-L5-MultipleTables-LastNameFirstName.SQL**, replace *LastNameFirstName* with your name as displayed in Blackboard.

**Purpose:** To practice data retrieval from multiple tables by joining tables in result sets.

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

**NOTE:** Run your queries on your database to make sure desired results are retrieved. Also import and execute your sql file to ensure it runs all your queries before submitting.

### Pre-Lab:

1. Start your mySQL server and open phpMyAdmin or Adminer.
2. Create a database for this lab (eg. http5126\_lab5). Set the collation as utf8\_unicode\_ci.
3. Select the DB then import and execute the SQL file 'lab5\_pet\_store\_tables.sql'. This should create 3 tables in your database (employees, stock\_items, & sales) which will be used for the queries you create below.

### Part 1: What are the sales for a particular item? (1%)

- A. Select all of the rows from the sales table with an item column value of 1014.
- B. Select date (from sales), item (from stock\_items) to get the items with a value of 1014.

### Part 2: What are the sales for a particular team member? (2%)

- A. Select all of the rows from the sales table with an employee column value of 111.
- B. Select date (from sales), first and last name (from employees), item (from sales) to show the sales from the employee with a value of 111.

### Part 3: What a week! and Go Team! (2%)

- A. Provide the date, item (from sales), and employee first name for all sales in the range of September 12 to September 18 (inclusive) of this year.
- B. Provide the count of all sales for each sales person (first name and last name) grouped by sales person. The results should show most sales to least sales.

**Part 4: Challenge (2%)**

- A. Based on the results from 3B above, use the sales person with the most sales for this query. For all sales provide the date, item (from stock\_items), price, category, and employee first name. Use aliases to rename your tables so your query is shorter to write. *For this and all future labs you may use these table aliases in queries if you would like to.*
- B. Create a count of the “Times Sold” for each item (sales). Provide the item id (stock items), items (stock\_items), prices, and categories. The result set must include all stock\_item items, whether there were any sales or not. This list should be ordered by the stock\_items id.

**Part 5: Challenge Yourself (1%)**

Create your own “human question” with the data set provided. Then write a query to answer this question. Your query should use at least 1 **JOIN** and should be **ordered** so data is easy to parse. Preferably you should use an **aggregate function** to make your query more interesting.

- A. Write the question you have created next to the comment on line 28 of the provided sql file. eg. “-- A <your question here>”.
- B. Create the query that returns the result your question asks for.