

Lab 3: Filter Data (5% of total grade)

Submission: Submit your answers by copying and pasting your query below each question, then submit your completed lab to blackboard. (Assessments > Lab 3 - Refining Data).

Name your file: **HTTP5126-L3-FilterData-LastNameFirstName.pdf**, replace *LastNameFirstName* with your name as displayed in Blackboard.

Purpose: To implement new keywords and clauses learned in Lesson 3 in order to answer “human” questions more precisely.

Requirements: For this assignment, 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 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.
2. Feel free to reuse the database from lab 2 or create a new one for lab 3 using the **pet_store_tables.sql** file (same file as lab 2).

Part 1: Getting Logical (AND/OR) (1%)

- A. Accountant: “Can you give me all the details for the employees that are either the manager or the assistant manager?”

```
SELECT * FROM `employee` WHERE role = 'assistant' OR role = 'manager';
```

- B. Assistant Manager: “Our fish supplier called, can you show me all of the data for our fish (piscine) items that have an inventory count of less than 24?”

```
SELECT * FROM `stock_item` WHERE category = 'piscine' AND inventory < 24;
```

Part 2: LIKE it a Lot (1%)

- A. Customer: “What kind of cages do you have, and how much are they?” HINT: What items do you have that end in “cage”?

```
SELECT * FROM `stock_item` WHERE item LIKE "%cage";
```

- B. Customer: "I was speaking with one of your sales associates, but I can't remember his name. It starts with F". HINT: What first name starts with F?

```
SELECT * FROM `employee` WHERE first_name LIKE "%F%";
```

Part 3: Providing a Range of Options (1%)

- A. Assistant Manager: "I'm working on the inventory report and need full details for all items with an ID from 1010 to 1015, inclusive. Could you get me that info?"

```
SELECT * FROM stock_item WHERE id BETWEEN 1010 AND 1015;
```

- B. Customer: "I'm buying something for my friend's dog, but my budget is \$10-\$20. What have you got in that range?"

```
SELECT * FROM stock_item WHERE category = 'canine' AND (price BETWEEN 10 and 20);
```

Part 4: Getting NOT Logical (1%)

- A. Manager: "It's time for the employee appreciation day, get me the names and phone numbers for all the employees excluding me and the assistant manager so I can give everyone the details"

```
SELECT first_name, last_name, phone FROM employee WHERE NOT role = 'manager' AND NOT role = 'assistant';
```

- B. Manager: "Can you get me the name, price, and inventory of items but do not include items for cats or dogs. Also do not include items with an inventory over 20."

```
SELECT item, price, inventory FROM stock_item WHERE NOT category = 'canine' AND NOT category = 'feline';
```

Part 5: Bringing ORDER to Your Data (1%)

- A. Manager: "I'm creating a contact list for the employees, can you get me the first names, last names, 'Job Title' and phone numbers for all of the employees. Sort them in alphabetical order by last name."

```
SELECT first_name, last_name, role, phone FROM employee ORDER BY last_name ASC;
```

- B. Manager: "Next week is Murine Monday, and we're having a sale on hamster and guinea pig items. Can you pull a list of products for them that have more than 20 in

stock? I need the ID, item name, price, and inventory, sorted from the most expensive to the least. Thanks!"

```
SELECT id, item, price, inventory FROM stock_item WHERE inventory > 20  
AND category = 'murine' ORDER BY price DESC;
```