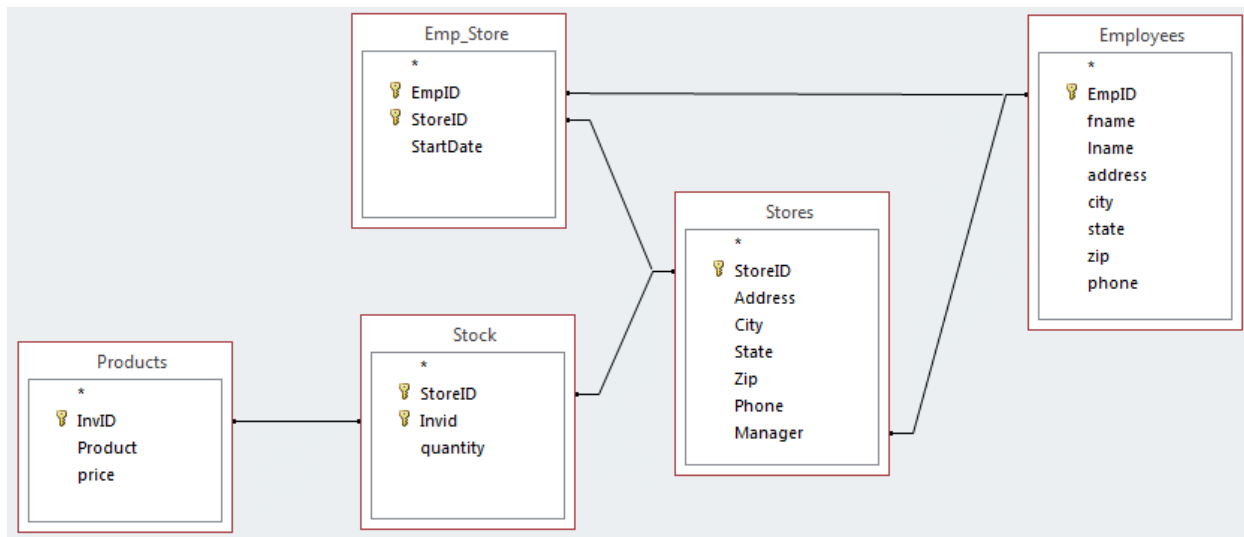## Assignment 3: Using Databases

In this assignment, you will run basic SQL queries to query and update store, product, and employee information.

Attempt this assignment yourself, then when you feel either **Lost** or **Successful**, watch this walkthrough video and correct any mistakes you might have made: https://bit.ly/DB1-A3

For each question, provide the SQL query and a screenshot of the results (unless otherwise noted) in a word document.

WRITE THE SQL QUERIES BY HAND! I realize it is possible to do most of this using the graphical "QBE" tool within Access – the SQL it creates is slightly different than the examples I gave you, so it will be obvious if you do this.

DO YOUR OWN WORK – I am fine with you all discussing the assignment with one another, but you should each individually type and run the SQL statements and **do your own screenshots and create your own document**.

You can find more SQL tutorials online, for example: http://www.w3schools.com/sql/

- Put your name in the header section of the word file
- Name your file lastname_a3.docx (i.e. grimes_a3.docx)

As an example I will do number 1 for you!

1. **Select all attributes for all employees and order them alphabetically by last name:**

SELECT * FROM Employees ORDER BY lname;

EmpID	fname	lname	address	city	state	zip	phone
1016	Lacy	Acosta	953-8683 Nec, §	Oxford	MS	38655	555-821-9800
1005	Clarke	Delgado	174-7411 Suspe	Cordova	TN	38103	555-764-4532
1017	Bert	Frye	Ap #207-8835 N	Oxford	MS	38655	555-507-9610
1007	Tina	Goff	1583 Augue St.	Marana	AZ	85373	555-843-7095
1004	Clayton	Hale	434 Amet St.	Memphis	TN	38103	555-499-9374
1001	Jack	Hatfield	395-6365 Aliqu	Nashville	TN	37212	555-980-5688
1013	Bert	Hensley	P.O. Box 984, 5	Tupelo	MS	38804	555-619-8184
1014	Troy	Kane	578-7454 Egest	Tupelo	MS	38804	555-228-5267
1015	David	Landry	Ap #551-6192 R	Oxford	MS	38655	555-895-7552
1009	Brandon	Leon	6109 Elementu	Tucson	AZ	85373	555-248-9721
1006	Kermit	Levine	P.O. Box 283, 4	Memphis	TN	38103	555-434-9263
1011	Castor	Mcknight	Ap #575-8716 A	Tupelo	MS	38804	555-570-9445
1008	Seth	Mercer	8928 Quisque S	Tucson	AZ	85373	555-799-6954
1003	Jesse	Noel	773 Id Rd.	Nashville	TN	37212	555-436-7282
1002	Duncan	Oneal	5344 Netus Rd.	Nashville	TN	37212	555-656-6212
1010	Wyatt	Talley	8251 Sed Aven	Oro Valley	AZ	85373	555-317-7170
1012	Brett	Weber	7864 Metus. Rd	Tupelo	MS	38804	555-575-9659

2. **Select the first name, last name, city, state and phone number for all employees living in Mississippi (MS)**

SELECT fname, lname, city, state, phone FROM Employees
WHERE state = 'MS';

fname	lname	city	state	phone
Castor	Mcknight	Tupelo	MS	555-570-9445
Brett	Weber	Tupelo	MS	555-575-9659
Bert	Hensley	Tupelo	MS	555-619-8184
Troy	Kane	Tupelo	MS	555-228-5267
David	Landry	Oxford	MS	555-895-7552
Lacy	Acosta	Oxford	MS	555-821-9800
Bert	Frye	Oxford	MS	555-507-9610

3. **For each store, display the store's address, city, state, zip, the manager's first and last name, and manger's phone number**

   SELECT Stores.address, Stores.city, Stores.state, Stores.zip, fname, lname, Employees.phone
   FROM Stores INNER JOIN Employees ON Stores.manager = Employees.empid;

address	city	state	zip	fname	lname	phone
1718 Belmont A	Nashville	TN	37212	Duncan	Oneal	555-656-6212
125 South Mair	Memphis	TN	38103	Clayton	Hale	555-499-9374
325 Oracle	Tucson	AZ	85737	Brandon	Leon	555-248-9721
120 West Main	Tupelo	MS	38804	Bert	Hensley	555-619-8184
355 Universtiy .	Oxford	MS	38655	Lacy	Acosta	555-821-9800

4. **Display the names and prices of products with a price over $40, ordered so that the most expensive item is at the top and the least expensive item is at the bottom**

   SELECT product, price FROM Products
   WHERE price > 40
   ORDER BY price DESC;

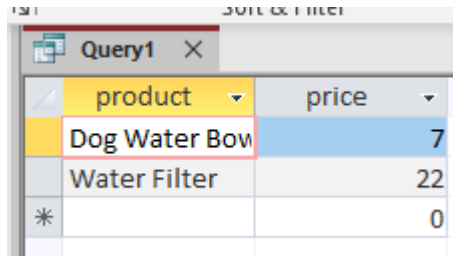 | product | price |
   |---|---|
   | Digital Camera | 240 |
   | Monitor | 140 |
   | Knife Set | 125 |
   | Radio | 86 |
   | Watch | 60 |
   | DVD Player | 60 |
   | Throw Rug | 60 |
   | Coffee Pot | 45 |
   | Hat Rack | 42 |
   | | 0 |

5. **Display the inventory for the Memphis store. Display the city, product, price and quantity. List each item alphabetically with the price and quantity in stock. If you cannot get the entire list in one screenshot that is OK – just take a screenshot that shows the first 10 items.**

   SELECT city, product, price, quantity
   FROM (Products INNER JOIN Stock ON Products.invid = Stock.invid)
   INNER JOIN Stores ON Stores.storeid = Stock.storeid
   WHERE city = 'Memphis'
   ORDER BY product ;

city	product	price	quantity
Memphis	Book light	8	2
Memphis	Broom	10	21
Memphis	Clock	14	24
Memphis	Coffee Mug	5	8
Memphis	Coffee Pot	45	22
Memphis	Digital Camera	240	5
Memphis	Dog Water Bow	7	10
Memphis	Dust pan	4	1
Memphis	DVD Player	60	24
Memphis	Floor Lamp	35	0
Memphis	Fly Swatter	1	11
Memphis	Hat Rack	42	12
Memphis	Ironing Board	22	0
Memphis	Knife Set	125	0
Memphis	Lava Lamp	40	16
Memphis	Magazine Rack	15	0
Memphis	Monitor	140	24
Memphis	Picture Frame	9	23
Memphis	Radio	86	2
Memphis	Rice Cooker	34	21
Memphis	Skillet	15	10
Memphis	Stapler	6	14
Memphis	Sunglasses	11	19
Memphis	Throw Rug	60	21
Memphis	Watch	60	23
Memphis	Water Filter	22	7
*		0	

6. **Display the name and price of all product with the word "water" anywhere in the product name.**
SELECT product, price FROM Products
WHERE product LIKE '*water*';

7. **Add a new employee with the following information (No Screenshot needed)**

   Employee ID: 9999
   Name: Molly Smith
   Address: 125 Timber Lane
   City: Oxford
   State: MS
   Zip: 38655
   Phone: 662-555-3245

   INSERT INTO Employees (empid, fname, lname, address, city, state, zip, phone) VALUES
   (9999, 'Molly', 'Smith', '125 Timber Lane', 'Oxford', 'MS', '38655', '662-555-3245');

8. **Associate the employee created in #7 with the Tucson store. Start date is 3/23/2019. (No Screenshot needed)**

   INSERT INTO Emp_Store(empid, storeid, startdate) VALUES(9999, 3, '3/23/2019');

9. **You are changing management styles! Make the employee you created in #7 the manager for all stores in Mississippi (MS) – do this using one SQL command (No Screenshot needed)**

   UPDATE Stores SET manager = 9999 WHERE state = 'MS';

10. **For each store, display the address, city, state, zip, manager's first and last name, and manger's phone number (Do this AFTER steps 7-9)**

    SELECT Stores.address, Stores.city, Stores.state, Stores.zip, fname, lname, Employees.phone

    FROM Stores INNER JOIN Employees ON Stores.manager = Employees.empid;

	Sort & Filter		Records		Find		Text

Query1 ✕   **Stores** ✕

address	city	state	zip	fname	lname	phone
1718 Belmont A	Nashville	TN	37212	Duncan	Oneal	555-656-6212
125 South Mair	Memphis	TN	38103	Clayton	Hale	555-499-9374
325 Oracle	Tucson	AZ	85737	Brandon	Leon	555-248-9721
120 West Main	Tupelo	MS	38804	Molly	Smith	662-555-3245
355 Universtiy	Oxford	MS	38655	Molly	Smith	662-555-3245