

## Assignment 5: Microsoft Access Queries and SQL Statements

**Due Date: Wednesday, March 20 by 6:00 pm.**

**Late Policy:** This assignment will be accepted up to one (1) day late.

Assignments submitted after March 20 at 6:00 PM but before March 21 at 6:00 AM will be deducted 10% of the total grade.

Assignments submitted after March 21 at 6:00 AM but before March 21 at 6:00 PM will be deducted 25% of the total grade.

Assignments submission will be closed at 6:00 PM on March 21 and no assignments can be submitted to OWL after that time.

## Project 1: Written SQL Statements

MANAGERS								
ManagerID	LastName	FirstName	HireDate	Address	City	Prov	PC	Phone
2991	Skywalker	Anakin	11/17/2006	100 BIRDIE COL	Toronto	ON	M5C1C3	9058484844
2997	Skywalker	Luke	7/24/2005	100 CIRCLEVIEW	Ottawa	ON	K1C6V8	6132343994
3137	Binks	JarJar	4/5/2004	10210 FALLS MI	Niagara Falls	ON	L2G7L9	4168543443
4102	Carrision	Landau	1/25/2007	1409 KESWICK	Windsor	ON	N8T1P7	5197563433
4204	Organa	Leia	3/20/2007	1500 LAFAYETT	Sarnia	ON	N7S0W2	5198473434
4419	Kenobi	Obiwan	2/11/2007	1620 VANDUYK	Peterborough	ON	K9H4C8	6133893384
4424	Kenobi	Rey	12/20/2006	16215 NORTH 3	London	ON	N6K0A5	5199923848
4833	Kenobi	Finn	6/4/2006	205 FIFTH AVE	Toronto	ON	M3C2B4	4168332345
4902	Damon	Po	3/12/2005	393 EAST AVE	Toronto	ON	M2W4R5	4163431232
*								
Record: 1 of 9								







manage				
ManID	AssignedDate	ProdManagedID	NumberEmployeesManages	LocationID
2991	28-Apr-18	6	25	5
2991	17-Feb-18	4	45	3
2997	13-Mar-18	3	4	8
3137	20-Feb-18	6	75	4
3137	18-Dec-17	4	150	2
4102	17-Jan-18	1	1	7
4204	06-Apr-18	5	175	3
4419	28-Apr-18	2	65	1
4424	28-Apr-18	5	255	6
8056	29-Mar-18	3	6	7
*				
Record: 1 of 10				

PRODUCT		
ProductID	ProductName	ProductPrice
1	Niblick Radio	15.23
2	Dunsel Calculator	65.05
3	Widget Gadget	95.25
4	Mobilie Stove	100.25
5	Zonk Suitcase	125.89
6	Hortuese Phone	75.57
* (New)		
Record: 1 of 6		

LOCATION	
ID	Location Name
1	Toronto - Centre
2	Toronto - Airport
3	Ottawa - Downtown
4	London
5	Windsor
6	Peterborough
7	Sarnia
8	Kingston
Record: 1 of 8	

Your company has a number of employees that are MANAGERS. Each MANAGER may 'manage' one or more PRODUCT. The database stores the date the MANAGER was assigned to each PRODUCT, the number of employees each manages per PRODUCT and the location of where each PRODUCT is manufactured. The database also stores the price of each PRODUCT.

Using the database shown above and create a Microsoft Word document containing the SQL statements (as shown in the lecture materials) to do the following:

-  1. Find the Manager ID, first name, last name, phone number and province for managers who live in Peterborough.
-  2. Modify the employee information for Manager ID equal to 3137 to your first name, last name and full address. (you may use a fake address, but must be your actual name).
-  3. Find only the Manager's first and last name and product managed ID for all assigned dates that took place in March 2018.
-  4. Find the Product Name, Product Price, Number of Employees Managed, Assigned Date, and Manager's Last Name for the products that have less than 50 employees being managed.
-  5. Find the number of products that you manage and save the result in a field labeled: Products Manages. (You MUST use your name in the query, NOT your Manager ID).
-  6. Find the Managers first and last name, manager's phone number, Assigned Date, Location Name and Product Name for all products that cost less than \$100.00.

Save the SQL statements in the Word document named "youraccountname\_sql.doc(x)".

#### HINT 1:

it is very easy to tell if a value is stored as a number or as text in an MS Access table.

-if the value is right justified (pushed to the right) then it is stored as a number.

-if the value is left justified (pushed to the left) then it is stored as a text.

#### HINT 2:

remember how field names with spaces are treated differently from field names without spaces.

#### HINT 3:

remember, round brackets are required to be used with all INNER JOIN statements.

**The format (how the SQL statements are written) MUST match the style shown in the notes.**

Each SQL reserved word **MUST** appear on their own line and in capital letters in the document.

Each SQL Statement **MUST** be indented as shown below. You will lose major marks otherwise.

example:

```
SELECT
    something
FROM
    ( somewhere
INNER JOIN
    somewhere else ON some condition )
WHERE
    some condition is true;
```

**This is non-optional. You MUST use this standard.**  
**You will be graded on adhering to this standard.**

**You MUST write the SQL without the use or aid of any electronic method.**

For example: You can NOT use MS Access Query Builder to create the SQL graphically and then copy or type in the result to your Word document. You will be graded on adhering to this standard.

**You must identify yourself on the document. You will lose marks if this is missing.**

**Somewhere visible on the beginning (top) of the Word file you must include:**

- your **first** and **last** name
- your **Western ID** (see below for a description of your Western ID)
- your **student number**

Save your SQL statements in the Word file named "youraccountname\_sql.doc(x)" and attach the file to your submission.

## **Project 2: Queries using Query Designer in Microsoft Access**

Create a brand new, blank database and name it "*youraccountname*\_Trains.accdb (.mdb)".  
(substitute *youraccountname* with your actual account name.)





Using the XML Import utility in MS Access import the data in the file Assign5.xml.



This will import five (5) tables with data into your database. Everything is set by this XML and the schema. No further action or intervention is required by the students on the MS Access file.

This database represents a listing of PASSENGER(s), the destination(s), and the CONDUCTOR(s) for the Ampax Train Line.

It also contains information on which CONDUCTORS **drive (trains)** to which destination and for which destination the PASSENGERS have purchased **tickets**.

Create a query using the Graphical Query Design Tool in the Create tab in MS Access for each of the following and name each query as follows: QueryA, QueryB, etc. so they match:

-  A. Create a query that changes the conductor's name with the CID of 001289348 to your first and last name.
-  B. Find the Province, TrainStation, Gate and Class for all of the DESTINATIONS whose TrainStations end with the designation of '1032' and have a 'B' Gate.
-  C. Find the Destination Identification number (DID), Province, TrainStation and Gate for all of the trains taken by the Passenger with the PassengerID is equal to "0056348".
-  D. Find the passenger number (PassengerID), first name and last name for all passengers who have bought tickets for a train to any TrainStation in Alberta. In addition to showing the passenger number, passenger first name and passenger last name, show the TrainStation and Gate as part of the resulting dataset. If a passenger has taken more than one train to Alberta that passenger will appear more than once in the resulting dataset.

-  E. Find the total number of tickets with the Destination of Alberta. Passengers who have taken more than one train to Alberta will be included in the answer for each train (ticket) that they have taken. Label this result field as: Alberta Trains
-  F. Find the passenger first name, passenger last name, Passenger Identification number (PassengerID), TrainStation, Gate and date of the train for all of the trains that you are the conductor. (use your last name and first name in the query not the CID). List the passengers in ascending order by the passenger's last name.

Save your database in the file you named "youraccountname\_Trains.accdb (.mdb)" and include the file to your submission to OWL.

## Submission Instructions:

You must upload, attach and submit, via the CS1032 OWL/Sakai course site, the following **2** files:

- youraccountname\_sql.docx (for later versions) (.doc – for Word 2003 or earlier)
- youraccountname\_Trains.accdb (for later versions) (.mdb – for Access 2003)

**NOTE:** This description of the assignment contains instructions that tell you to create files with names that have a specific format. In these file names; the “youraccountname” is your university username.

AND AGAIN PLEASE: Do not cheat or copy.

When I ask students what I can do to limit the cheating, they recommend I remind the students that we do check the work and that there is a high probably they will be caught. So, here is that reminder.