



CPSC203: (DATABASES) WEEK-2 LAB-2 MULTI-TABLE QUERIES, AGGREGATE QUERIES

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COURSE WEBSITE

[http://wiki.ucalgary.ca/page/
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EXAMPLE

TASKS:

- Create two tables Customers(CustomerID, Name, Company name) and Order Details(OrderID, Product ID, CustomerID, Quantity)
- Create relationship between the tables based on the customerID.



EXAMPLE

Using the sample database “BookExample” write the following queries:

- Write a query that retrieves all data from a single table and displays the information.
- Write a query that retrieves all the data from multiple tables and displays all the information
- Write a query that retrieves some specific fields from multiple tables and displays the specified information



EXAMPLE

- Write a query that retrieves some specific fields from multiple tables, however with some constraints and displays the specified information.

First we will show the query using the logical AND constraint and then we will perform the same query but using a logical OR constraint. You should notice that depending on which logical condition employed, you should get different results.



EXAMPLE

- Write a query that retrieves all data from multiple tables and displays the information with some added calculations. For example, determining sales profits based on the information retrieved such as: book title sales, book price, book advance, and book royalty rate.
- Write a query that retrieves some specific information as well as uses a field to perform a calculation. For example, this query will obtain all book publishers and performs an average calculation to determine what each book publisher's average is for giving an advance to book authors.



EXAMPLE

- Write a query that retrieves the same information as the previous query did, however with some constraints using logical AND as well as logical OR operations.



EXCERCISE

- Consider the database with the following tables:

EMPLOYEE(SIN,Name,Gender,Salary,Number,City,
Dnumber)

DEPARTMENT

(Dnumber,Dname,MGR_SIN,Start Date)

PROJECT

(Pnumber,Pname,Location,Dnumber)

PROJ_EMP

(SIN,Pnumber,Hours)



EXCERCISE

Now do the following:

- Create relationship among the tables
- Put some sample data into the tables.

Write the following queries:

5. Retrieve employees whose salary is less than \$1000
6. Retrieve employees whose salary is less than \$1000 and live in Calgary.
7. Retrieve projects those are controlled by the finance department
8. Find the average hours that employees are working on each project
9. Find the total salary per department as long as the total is more than \$10000.