Review the HalfFoods database model on D2L. It describes the database you will be querying.

Write SQL queries in MySQL Workbench to answer the following questions using the HalfFoods Orders database that is located at adams.uww.edu port 3306. Your user name and password are the same as they were for Asn 03.

After creating and running a SQL query that produces the correct answer for the given question, copy the query to the clipboard and paste it below the question. Then select all the rows in your result, right click, and choose **Copy Row (with names unquoted)**. Then paste the results below your query.

For example:

List the first names, last names, job titles, and hire dates, for employees not involved with sales.

SELECT e.firstName,e.lastName,jobTitle,hireDate

FROM Employee e, EmployeePersonal p

WHERE e.employeeId = p.employeeId

AND jobTitle NOT LIKE '%Sales%';

# firstName, lastName, jobTitle, hireDate

Toni, Frederickson, Vice President, Advertising, 2007-06-06

Nolan, Westly, Vice President, Human Resource, 2008-11-16

Phyllis, Swanson, President, 2011-01-15

Bob, Leitheiser, Janitor, 2015-01-26

Tony, Chang, Operations Manager, 2000-06-01

Susan, Roberts, Warehouse Manager, 2010-09-01

Do not include more in the query than you need to answer the question; i.e., only include columns that are asked for or are part of the selection criteria.

Each of your queries will access a more than one table or the same table more than once. All calculated columns should be given a name. NOTE: none of these queries should return more than 30 rows.

**Reminder: this is not a group project. You need to do the assignment by yourself. There are severe penalties for all parties who share answers.**

Generate the SQL queries that will provide answers to the questions below and show the query results directly below each question.

1. Who are our German customers (id and name) and in what city are they located?

SELECT c.customerId, c.customerName, l.city

FROM CityLookUp l, Customer c

WHERE locatedInCityId = l.cityId

AND country = 'Germany';

# customerId, customerName, city

ALFKI, Alfreds Futterkiste, Berlin

BLAUS, Blauer See Delikatessen, Mannheim

DRACD, Drachenblut Delikatessen, Aachen

FRANK, Frankenversand, Munchen

KOENE, Koniglich Essen, Brandenburg

LEHMS, Lehmanns Marktstand, Frankfurt a.M.

MORGK, Morgenstern Gesundkost, Leipzig

OTTIK, Ottilies Kaseladen, Koln

QUICK, QUICK-Stop, Cunewalde

TOMSP, Toms Spezialitaten, Munster

WANDK, Die Wandernde Kuh, Stuttgart

1. What customers (id and name) shipped orders to London? (Get rid of duplicates.)

SELECT distinct o.customerId, c.customerName

FROM CustOrder o, Customer c

WHERE o.customerId = c.customerId

AND shipToCityId IN (4, 12, 17, 20, 53, 70, 100, 101, 102, 104);

# customerId, customerName

BSBEV, B's Beverages

CONSH, Consolidated Holdings

EASTC, Eastern Connection

NORTS, North/South

SEVES, Seven Seas Imports

1. What 2016 orders where shipped to Argentina or Brazil that had freight costs less than $20? Show the order id, ship date, freight cost, ship to country and shipper name.

SELECT o.orderId, o.shipDate, o.freightCost, l.country, s.shipperName

FROM CustOrder o, CityLookUp l, Shipper s

WHERE o.shipToCityId = l.cityId

AND o.shipperId = s.shipperId

AND o.freightCost < '20'

AND l.country IN ('Argentina','Brazil')

AND (o.shipDate > '2016-01-01'

AND o.shipDate < '2017-01-01');

# orderId, shipDate, freightCost, country, shipperName

10531, 2016-03-23, 8.12, Argentina, Speedy Express

10881, 2016-12-20, 2.84, Argentina, Speedy Express

10466, 2016-01-16, 11.93, Brazil, Speedy Express

10581, 2016-05-05, 3.01, Brazil, Speedy Express

10645, 2016-07-05, 12.41, Brazil, Speedy Express

10690, 2016-08-06, 15.80, Brazil, Speedy Express

10704, 2016-09-08, 4.78, Brazil, Speedy Express

10585, 2016-05-13, 13.41, Brazil, Speedy Express

10809, 2016-11-09, 4.87, Brazil, Speedy Express

10521, 2016-03-06, 17.22, Argentina, United Package

10512, 2016-02-26, 3.53, Brazil, United Package

10652, 2016-07-11, 7.14, Brazil, United Package

10777, 2016-11-23, 3.01, Brazil, United Package

10720, 2016-09-07, 9.53, Brazil, United Package

10648, 2016-07-12, 14.25, Brazil, United Package

10644, 2016-07-04, 0.14, Brazil, United Package

10782, 2016-10-24, 1.10, Argentina, Federal Shipping

10819, 2016-11-18, 19.76, Argentina, Federal Shipping

10725, 2016-09-07, 10.83, Brazil, Federal Shipping

10734, 2016-09-13, 1.63, Brazil, Federal Shipping

10770, 2016-10-19, 5.32, Brazil, Federal Shipping

1. What products (id and name) were on order #10400? What are their standard unit prices and the prices that were actually paid? Calculate and display the price differences. Also show the customer name.

SELECT r.productId, r.prodName, p.unitPrice, r.paidPrice,

p.unitPrice - r.paidPrice AS difference, o.customerName

FROM CustOrder o, OrderedProduct r, Product p

WHERE o.orderId = r.orderId

AND r.productId = p.productId

AND o.orderId = '10400';

# productId, prodName, unitPrice, paidPrice, difference, customerName

29, Thuringer Rostbratwurst, 136.16, 108.90, 27.26, Eastern Connection

35, Steeleye Stout, 19.80, 15.84, 3.96, Eastern Connection

49, Maxilaku, 22.00, 17.60, 4.40, Eastern Connection

1. Which orders were sent in September 2015 to customers headquartered in Brazil, Venezuela, Mexico, or Columbia? What were their ids, order dates, and customer cities and countries, along with the responsible employee’s full name (1 field) and job title. (HINT: the headquarters are not the same as the ship to locations.)

SELECT o.orderId, o.orderDate, l.city, l.country,

CONCAT(firstName,' ',lastName) AS fullName, e.jobTitle

FROM CustOrder o, CityLookUp l, Employee e

WHERE o.shipToCityId = l.cityId

AND o.employeeId = e.employeeId

AND o.orderDate >= '2015-09-01'

AND o.orderDate <= '2015-09-30'

GROUP BY o.orderId

# orderId, orderDate, city, country, fullName, jobTitle

10339, 2015-09-03, Montreal, Canada, Alice Jensen, Vice President, Sales

10340, 2015-09-04, Marseille, France, Nancy Davolio, Sales Representative

10341, 2015-09-04, Kobenhavn, Denmark, Robert King, Sales Representative

10342, 2015-09-05, Munchen, Germany, Margaret Peacock, Sales Representative

10343, 2015-09-05, Frankfurt a.M. , Germany, Margaret Peacock, Sales Representative

10344, 2015-09-06, Seattle, USA, Margaret Peacock, Sales Representative

10345, 2015-09-08, Cunewalde, Germany, Alice Jensen, Vice President, Sales

10346, 2015-09-08, Albuquerque, USA, Janet Leverling, Sales Representative

10347, 2015-09-08, Sao Paulo, Brazil, Margaret Peacock, Sales Representative

10348, 2015-09-09, Stuttgart, Germany, Margaret Peacock, Sales Representative

10349, 2015-09-10, Lander, USA, Robert King, Sales Representative

10350, 2015-09-13, Toulouse, France, Michael Suyama, Sales Representative

10351, 2015-09-13, Graz, Austria, Nancy Davolio, Sales Representative

10352, 2015-09-14, Lisboa, Portugal, Janet Leverling, Sales Representative

10353, 2015-09-15, Salzburg, Austria, Robert King, Sales Representative

10354, 2015-09-16, Mexico D.F., Mexico, Laura Callahan, Inside Sales Coordinator

10355, 2015-09-17, Colchester, UK, Michael Suyama, Sales Representative

10356, 2015-09-20, Stuttgart, Germany, Michael Suyama, Sales Representative

10357, 2015-09-21, Barquisimeto, Venezuela, Nancy Davolio, Sales Representative

10358, 2015-09-22, Toulouse, France, Steven Buchanan, Sales Manager

10359, 2015-09-23, London, UK, Steven Buchanan, Sales Manager

10360, 2015-09-24, Strasbourg, France, Margaret Peacock, Sales Representative

10361, 2015-09-24, Cunewalde, Germany, Nancy Davolio, Sales Representative

10362, 2015-09-27, Marseille, France, Janet Leverling, Sales Representative

10363, 2015-09-28, Aachen, Germany, Margaret Peacock, Sales Representative

10364, 2015-09-28, London, UK, Nancy Davolio, Sales Representative

10365, 2015-09-29, Mexico D.F., Mexico, Janet Leverling, Sales Representative

10366, 2015-09-30, Barcelona, Spain, Laura Callahan, Inside Sales Coordinator

10367, 2015-09-30, Arhus, Denmark, Robert King, Sales Representative

1. What is the total value of all products shipped to Mexico in 2016? (NOTE: freight cost is NOT part of value).

SELECT SUM(qtyOrdered\*paidPrice) AS TotalValue

FROM CustOrder o, CityLookUp l, OrderedProduct p

WHERE o.orderId = p.orderId

AND o.shipToCityId = l.cityId

AND l.country = 'Mexico'

# TotalValue

26480.47

1. Create a time series that shows month by month in 2016, total order revenue and total order quantities. To be friendly show month names.

SELECT MONTH(o.orderDate) AS monthNumber, MONTHNAME(orderDate) AS monthName,

SUM(p.paidPrice) AS paidSum, SUM(p.qtyOrdered) AS qtySum

FROM OrderedProduct p, CustOrder o

WHERE o.orderId = p.orderId

AND YEAR(o.orderDate) = 2016

GROUP BY MONTHNAME(o.orderDate)

ORDER BY monthNumber;

# monthNumber, monthName, paidSum, qtySum

1, January, 1742.40, 1622

2, February, 2126.30, 1638

3, March, 2883.45, 2020

4, April, 2070.86, 1667

5, May, 2107.75, 2101

6, June, 2662.05, 1782

7, July, 2545.16, 2291

8, August, 2810.64, 2356

9, September, 2720.97, 2073

10, October, 3306.67, 2506

11, November, 5512.52, 3322

12, December, 3818.40, 3219

1. What discounted orders were there for our lowest priced product (standard price)? When were the products ordered, what was the paid price, quantity ordered and discount percentage? Show the price of the product. Sort by order date. (HINT: you need joins and a subquery)

SELECT p.orderId, o.orderDate, (p.paidPrice \* qtyOrdered) AS totalPaidPrice,

p.paidPrice, p.qtyOrdered, p.discPercent, (t.unitPrice) AS priceOfProduct

FROM OrderedProduct p, CustOrder o, Product t

WHERE p.orderId = o.orderId

AND p.productId = t.productId

AND t.unitPrice = '2.75'

AND p.discPercent > 0

ORDER BY o.orderDate;

# orderId, orderDate, totalPaidPrice, paidPrice, qtyOrdered, discPercent, priceOfProduct

10252, 2015-05-14, 55.00, 2.20, 25, 0.05, 2.75

10269, 2015-06-05, 132.00, 2.20, 60, 0.05, 2.75

10454, 2015-12-24, 44.00, 2.20, 20, 0.20, 2.75

10515, 2016-02-25, 44.00, 2.75, 16, 0.15, 2.75

10528, 2016-03-07, 22.00, 2.75, 8, 0.20, 2.75

10562, 2016-04-14, 55.00, 2.75, 20, 0.10, 2.75

10632, 2016-06-17, 55.00, 2.75, 20, 0.05, 2.75

10677, 2016-07-25, 22.00, 2.75, 8, 0.15, 2.75

10850, 2016-11-25, 11.00, 2.75, 4, 0.15, 2.75

10913, 2016-12-28, 110.00, 2.75, 40, 0.25, 2.75

10951, 2017-01-18, 41.25, 2.75, 15, 0.05, 2.75

1. Create a single phone list of contacts for USA based customers and our employees. List the phone numbers with full names (last name first, then comma, space and first name). Make sure that customer contacts and employees are clearly labeled so there is no confusion over who is who. Sort the list in alphabetical order by name. (HINT: you need a union for this.) (NOTE: this result is under 30 rows.)

SELECT c.phone, CONCAT(c.lastName,', ',c.firstName) AS fullName, CONCAT('HFC - ', c.title) title FROM Contact c

UNION

SELECT e.workPhone, CONCAT(e.lastName,', ',e.firstName) AS fullName, CONCAT('HFE - ', e.jobTitle) jobTitle FROM Employee e

UNION

SELECT NULL FROM Contact c, Customer u, CityLookUp l, EmployeePersonal p

WHERE c.customerId = u.customerId

AND u.locatedInCityId = l.cityId

AND e.employeeId = p.livesInCityId

AND p.livesInCityId = l.cityId

AND l.country = 'USA'

ORDER BY fullName;

Cannot figure out solution.

1. Create your own interesting question and query that uses **multiple** tables. Show the question, query and results. Trivial or derivative queries will not receive full points.

What is location of our three top salespeople?

SELECT SUM(IF(p.orderId = c.orderId,(p.paidPrice\*p.qtyOrdered) AS orderTotal)), SUM(orderTotal) AS totalSales, e.employeeId

FROM CustOrder o, OrderedProduct p, Employee e

ORDER BY totalSales;

Okay, that was harder than I expected.

Have fun!