Review the Half-Foods Orders 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 Half-Foods Orders database that is located at adams.uww.edu port 3306. The user name for logging in is 314User. The password is available from your professor.

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:

What are the ids and names of all our shippers?

SELECT shipperId,shipperName

FROM Shipper;

# shipperId, shipperName

1, Speedy Express

2, United Package

3, Federal Shipping

4, Bobs Box Service

5, Faster Then Snails

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 single table. All calculated columns should be given a name. NOTE: none of these queries should take more than 20 rows.

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

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

1. Who are our Sales Representatives? List their ids, first names and last names.

SELECT employeeId,firstName,lastName

FROM Employee

WHERE jobTitle = 'Sales Representative';

# employeeId, firstName, lastName

1, Nancy, Davolio

3, Janet, Leverling

4, Margaret, Peacock

6, Michael, Suyama

7, Robert, King

9, Anne, Dodsworth

2. Which employees are involved in sales? List their ids, full names, and job titles.

SELECT employeeId,firstName,lastName,jobTitle

FROM Employee

WHERE jobTitle Like '%Sales%';

# employeeId, firstName, lastName, jobTitle

1, Nancy, Davolio, Sales Representative

2, Alice, Jensen, Vice President, Sales

3, Janet, Leverling, Sales Representative

4, Margaret, Peacock, Sales Representative

5, Steven, Buchanan, Sales Manager

6, Michael, Suyama, Sales Representative

7, Robert, King, Sales Representative

8, Laura, Callahan, Inside Sales Coordinator

9, Anne, Dodsworth, Sales Representative

3. Which orders had freight costs over $250 and were shipped between January 1, 2016 and April 1, of the same year? Show the order ids, ship dates, freight costs and the name of the company they were shipped to.

SELECT orderId,shipDate,freightCost,shipToName

FROM CustOrder

WHERE freightCost > 250

AND shipDate BETWEEN '2016-01-01' AND '2016-04-01';

# orderId, shipDate, freightCost, shipToName

10479, 2016-01-24, 708.95, Rattlesnake Canyon Grocery

10510, 2016-03-01, 367.63, Save-a-lot Markets

10511, 2016-02-23, 350.64, Bon app'

10514, 2016-03-20, 789.95, Ernst Handel

10530, 2016-03-16, 339.22, Piccolo und mehr

4. Which orders (id) where shipped late in 2017? Who where they shipped to, what were the required and ship dates, and how many days were they late? (HINT: you need a function for this.)

SELECT shipToName,requiredDate,shipDate,DATEDIFF(requiredDate,shipDate) AS daysLate

FROM CustOrder

WHERE shipDate BETWEEN '2017-01-01' AND '2017-12-31'

AND shipDate > requiredDate;

# shipToName, requiredDate, shipDate, daysLate

Berglunds snabbkop, 2017-02-01, 2017-02-09, -8

La corne d'abondance, 2017-02-02, 2017-02-09, -7

HILARION-Abastos, 2017-02-02, 2017-02-09, -7

Bolido Comidas preparadas, 2017-02-07, 2017-02-25, -18

Maison Dewey, 2017-02-23, 2017-02-24, -1

Wolski Zajazd, 2017-02-17, 2017-02-18, -1

5. Which of our products sold in boxes or bottles have unit prices under %15? List the products (id and name) along with their quantities per unit and unit price.

SELECT productId,prodName,qtyPerUnit,unitPrice

FROM Product

WHERE ((qtyPerUnit Like '%box%')

OR (qtyPerUnit LIKE '%bottle%'))

AND unitPrice < 15;

# productId, prodName, qtyPerUnit, unitPrice

3, Aniseed Syrup, 12 - 550 ml bottles, 11.00

13, Konbu, 2 kg box, 6.60

19, Teatime Chocolate Biscuits, 10 boxes x 12 pieces, 10.12

47, Zaanse koeken, 10 - 4 oz boxes, 10.45

52, Filo Mix, 16 - 2 kg boxes, 7.70

68, Scottish Longbreads, 10 boxes x 8 pieces, 13.75

75, Rhonbrau Klosterbier, 24 - 0.5 l bottles, 8.52

77, Original Frankfurter grune SoBe, 12 boxes, 14.30

6. Analyze our discounted ordered products. For products that have been discounted, what is the average price paid, highest price paid, lowest price paid and the range of prices paid? Also, how many product orders were analyzed? (HINT: 1 query) (NOTE: this is not the quantity ordered).

SELECT AVG(paidPrice) AS discAveragePrice,MAX(paidPrice)discHighestPrice,MIN(paidPrice)discLowestPrice,ABS(MAX(paidPrice)-MIN(paidPrice))discPriceRange,SUM(discPercent > 0)numDiscProd

FROM OrderedProduct

WHERE discPercent > 0;

# discAveragePrice, discHighestPrice, discLowestPrice, discPriceRange, numDiscProd

28.482976, 289.85, 2.20, 287.65, 840

7. For products sold in packages (i.e., abbreviated pkg), how many are discontinued and how many are active? Also, what is the average standard price for each?

SELECT SUM(discontinued = 'D') AS numProdDiscon,SUM(discontinued = 'A') AS numProdAvail,AVG(IF(discontinued='D',unitPrice,null)) AS avgDiscPrice,AVG(IF(discontinued='A',unitPrice,null)) AS avgAvaPrice

FROM Product

WHERE qtyPerUnit LIKE '%pkg%';

# numProdDiscon, numProdAvail, avgDiscPrice, avgAvaPrice

2, 22, 61.050000, 29.764545

8. How many Monday shipments, were there by customer (i.e., customer name), during 2016, and what was the total of their freight costs? Only show customers with more than 1 shipment. Sort so that the customer with the highest total freight cost is highest.

SELECT COUNT(\*) AS numMonShip,customerName,SUM(freightCost) AS totalFreightCost

FROM CustOrder

WHERE DAYNAME(shipDate) = 'Monday'

AND shipDate BETWEEN '2016-01-01' AND '2016-12-31'

GROUP BY customerName HAVING count(\*) > 1

ORDER BY totalFreightCost DESC;

# numMonShip, customerName, totalFreightCost

# numMonShip, customerName, totalFreightCost

3, QUICK-Stop, 1414.49

3, Save-a-lot Markets, 848.45

2, Tortuga Restaurante, 220.16

3, Lehmanns Marktstand, 200.93

2, Around the Horn, 157.28

2, Antonio Moreno Taqueria, 143.27

2, Magazzini Alimentari Riuniti, 135.57

3, White Clover Markets, 118.53

2, Simons bistro, 34.19

2, HILARION-Abastos, 33.78

2, Victuailles en stock, 31.37

9. List the average number of days between the order date and the required date, for orders in 2016, by month. Use the month number and name and list in calendar order. Round the average to the nearest whole number.

SELECT ROUND(AVG(DATEDIFF(orderDate,requiredDate))) AS fulfillmentTime, monthname(orderdate) AS month

FROM CustOrder

Where orderDate BETWEEN '2016-01-01' AND '2016-12-31'

GROUP BY month

ORDER BY MONTH(orderDate);

# fulfillmentTime, month

-25, January

-27, February

-27, March

-27, April

-27, May

-27, June

-28, July

-26, August

-27, September

-26, October

-26, November

-30, December

10. Create your own interesting question and query that uses a **single** table. Show the question, query and results. Trivial or derivative queries will not receive full points.

What are the look up codes for the top three cities that HalfFoods ships to the most?

SELECT count(\*) AS numShip,shipToCityId

FROM CustOrder

GROUP BY shipToCityId

ORDER BY numShip DESC LIMIT 3;

# numShip, shipToCityId

31, 69

30, 21

28, 62

Have fun!