MSDS 7330

Unit 5: Homework

1. Write an SQL to list the customers in terms of the Avg Order Totals sorted in a descending order

```
select CustomerTable_CustomerID, avg(OrderNumber)
from orderheader
group by CustomerTable_CustomerID
order by avg(OrderNumber) desc;
```

2. Write an SQL query to list the most frequently order item for each customer

```
SELECT CustomerTable_CustomerID,  Item_ItemNumber, MAX(Times) AS
TimesOrdered
from(
select CustomerTable_CustomerID, Item_ItemNumber, count(*) as Times
from orderheader, orderline
where OrderNumber = OrderHeader_OrderNumber
group by CustomerTable_CustomerID, Item_ItemNumber
order by Times desc)tmp
group by CustomerTable_CustomerID
order by CustomerTable_CustomerID asc;
```

3. Write an SQL query to list the most frequently ordered item category for each customer
   Don't know if this right since it saying appliances for all customers.

```
SELECT CustomerTable_CustomerID, ItemCategory, MAX(Times) AS
MaxCategoryOrdered
from(
select CustomerTable_CustomerID, ItemCategory, count(*) as Times
from OrderHeader, OrderLine, item
where OrderNumber=OrderHeader_OrderNumber
  group by CustomerTable_CustomerID, ItemCategory
  order by Times desc)tmp
  group by CustomerTable_CustomerID
  order by CustomerTable_CustomerID asc;
```

4. The following query we executed in the class calcs various parameters for each customer. Using statistical procedures test and report the columns that have the highest correlations. Are there any conclusions you can draw from this test?

```
select
sum(Quantity*PricePerQty) TotalSpend ,
oh.CustomerTable_CustomerID CustomerID  ,
datediff(curdate(),min(oh.OrderDate) ) AgeInDays ,
count(distinct oh.OrderNumber) NumOrders
from
OrderHeader oh ,
OrderLine ol
where
```

```
oh.OrderNumber=ol.OrderHeader_OrderNumber
group by
CustomerID;
```

Usually the longer the customer has been in the system the more they spend and order.