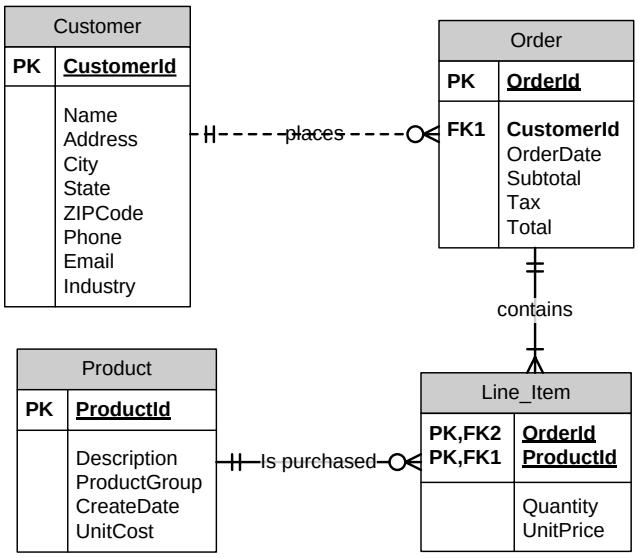
Anthony Basil

Final Exam: Problem Solving (40 points)

Instructions:

1. This is an **individual** exam.
2. This is the second part of the two part exam. First part is the multiple choice portion available separately.
3. Provide your responses on this file, save it, and upload the file to the appropriate assignment response in blackboard.
4. You may upload **only one** attempt.
5. Do not handwrite any responses.
6. If you have any additional information you would like me to know about this assignment, you may provide that to me at the end of this document as a note.

Using the data model below, answer the following questions by writing a single SQL query to produce the required results. You do not have to write SQL to create the tables shown below (30 points). Clearly list assumptions, if any, you made.



a. We're adding a new product to our catalog – we're calling it the 'Dali Clock', and our design team gave it a Product Id of TPS0042. It's part of our Timepieces product group. It was created today, so use today's date for createdate. Oh, and we are yet to estimate the cost per unit to make it, so it is not available to you and is not required to be entered into the database. Add it to the database (**5 points)**

Insert into Product values("TPS0042", "Dali Clock", "Timepieces", CURRENT_DATE, NULL);

b. One of our customer with the name – Jenny's Wholesale Club – changed their contact information. The phone number and the email address are now different. Set the phone number to last seven digits of your studentID number, and the e-mail address should be changed to your UofL email address. (**5 points)**

Update customer set(Phone=1708812, Email="ahbasi01@louisville.edu" where Name="Jenny's Wholesale Club");

c. We need a list showing us the total number of customers. It is extremely important for your manager that this list is broken down by industry without which he refuses to look at the report (**5 points)**

Select Industry, count(CustomerID) from Customer group by Industry;

d. How can we see all of the ***unique*** product descriptions that customer with the name "Madonna's Beauty Supply" has purchased from us, to evaluate cross-selling opportunities (**10 points)**

Select Distinct(p.Description) from Product as p, Order as o, Customer as c, Line_Item as l where p.ProductId=l.ProductId AND l.OrderId=o.OrderId AND o.CustomerId=c.CustomerId AND c.Name="Madonna's Beauty Supply";

e. Finally, your manager would like to know which product groups sell the most for the current calendar year. Prepare a sales volume report with the columns product group and total quantity sold for all sales since the beginning of the current year. (**15 points).**

Select p.ProductGroup, count(l.OrderId) from Product as p.Line_Item as l where p.ProductId=l.ProductId group by p.ProductGroup;