Unit 05 Problem Set Submission Form

# Overview

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# Instructions

Put your name and SU email at the top. Answer these questions all from the lab. When asked to include screenshots, please follow the screen shot guidelines from the first lab.

Remember as you complete the problem sets it is not only about getting it right / correct. We will discuss the answers in class so it’s important to articulate anything you would like to contribute to the discussion in your answer:

* If you feel the question is vague, include any assumptions you've made.
* If you feel the answer requires interpretation or justification provide it.
* If you do not know the answer to the question, articulate what you tried and how you are stuck.

This how you receive credit for answering questions which might not be correct.

# Questions

Answer these questions using the problem set submission template. You will need to consult the logical model in the overview section for details. For any screenshots provided, please follow the guidelines for submitting a screenshot.

Write the following as SQL queries. If the query is ambiguous, fill in the gaps yourself and justify your reasoning. For each, include the SQL as a screenshot with the output of the query.

1. The GIS department would like to get a list of latitudes and longitudes of those vBay users who

make valid bids on items and review users also. These are considered active participants in the platform and they would like to plot them on a map for a real-time dashboard.

A picture containing table

Description automatically generated

1. Northwind Traders would like to send out holiday cards to its Employees, Customers and Suppliers. Create a single mailing list from these sources. The mailing address should have 4 lines:   
   0) a label of the source of the address: Employee, Customer, or Supplier

1) customer name and title,   
2) company,   
3) address, City, Region, Country, postal code

Table

Description automatically generated

1. vBay would like a list of items with item id name and type along with a count of bids with bid

type (ok, low\_bid, item\_seller). There should be a column for each of the bid types.

Table

Description automatically generated

1. Northwind traders has 3 different shippers. For each customer ID and CompanyName list the total amount of shipping freight paid for each of the three different shippers. There should be a column for each shipper.  
   Graphical user interface, application

   Description automatically generated

I know this is definitely not correct, but I wanted to try writing out what it would like. I got into some errors with my ‘with’ clause saying its not a recognized table hints option. I know you had to join the customers to orders and use a pivot clause with the sum aggregate, but I could not get it to work in terms of syntax.

1. Unpivot all the dates in the Northwind orders table, creating a table output with three columns: order id, type of date (ship date, require date, order date) and the date itself.  
   Graphical user interface, text, table

   Description automatically generated
2. Unpivot the FudgeFlix titles which are just Movies so that is it easier to query titles which are available in different formats such as instant, DVD, and Blu-ray. Flatten these three columns into a single column with types, but only include a row when the value is 1 in the column.   
   Graphical user interface, text, application, email

   Description automatically generated
3. Get a list of the employees from the payroll database as they were on May 31, 2018.  
   Table

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4. Produce a report of Gus Toffwind's pay increases from the payroll database. Include the id, name SSN of the employee along with pay rate, previous pay rate and pay increase (difference between the current and previous pay rates).  
   Table

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# Reflection

Use this section to reflect on your learning. To achieve the highest grade on the assignment you must be as descriptive and personal as possible with your reflection.

1. What are the key things you learned through the process of completing this assignment?  
   I learned how to combine data from tables using the union clauses intersect and union all. It is such a convenient way to combine two tables and find common values than searching through hundreds of rows.
2. What were the challenges or roadblocks (if any) you encountered on the way to completing it?  
     
   Some challenges were definitely using the pivot/unpivot clauses as well as the temporal queries. I had a little trouble knowing if the columns I referenced were done correctly or had the proper syntax. The pivot statement I struggled with the most when it came to using a with statement and formatting it properly along with the pivot statement.
3. Were you prepared for this assignment? What can you do to be better prepared?  
   I was prepared for this assignment by watching the lecture and reading the chapter as well as watching YouTube videos, but I think next time I should take a stab at the practice problems in the chapter.
4. Now that you have completed the assignment rate your comfort level with this week’s material. This should be an honest assessment: (choose one)  
     
   4 ==> I understand this material and can explain it to others.  
   **3 ==> I understand this material.**  
   2 ==> I somewhat understand the material but sometimes need guidance from others.  
   1 ==> I understand very little of this material and need extra help.