**Project Milestone #3 – SQL**

**CIS 305 Dr. Sonya Zhang   
Due to Blackboard Sunday July 23rd 2016 11:59pm  
Total 10 points or 10% of Course Grade**

**Overview:**

**Task 1: Use one and only one SQL Statement to get results for each of the following items.**

Query # Description

1. List all customers showing the customer ID, customer name, and state, sorted by state, with customer names in alphabetical order within each state.
2. List the Customer ID, Customer Name, Order ID, Order Date, and Total Order Amount (use alias) for all customers, sorted by Total Order amount (the highest amount first).
3. List the name of the customer(s) who ordered the products that have the word “alarm” in it, together with the Product Name, Unit Price, Order Quantity, sorted by customer name in alphabetical order.
4. List the ID, name and average unit cost of the product(s) that has more than one supplier, sorted by the number of suppliers in descending order (the highest number of suppliers first).
5. List the ID and name of the product(s) that didn’t get ordered. Use a subquery.

Note: When asked to look up by the name (e.g. product name), don’t look up the id (e.g. productID) manually in their original table (e.g. Product\_T) and then use it in your SQL – of course that’s easier but that’s cheating. Instead you should consider using joins and conditions to look up with given criteria.

**What to include in your project report:**

* Provide the following in one page for each query in the order given above:
  + Query # AND Description (copy them directly from this requirement document). Screenshots without Query # and description will not be graded. Even if you don't have a solution to submit, still include the query# and description and leave the rest of the page blank.
  + A screenshot for each query, showing the SQL statement used and the results. Make sure that COMPLETE SQL statement and COMPLETE result set are visible in your screenshot(s). Make sure to capture the number of results returned in the bottom right corner.
  + You can take multiple screenshots if you have to in order to capture the entire result set, but make sure to crop each screenshot, put them together and labeled so they are readable as a whole. Missing or incomplete screenshots will result in deduction.
* Make each screenshot is big enough to be readable.
* In all screenshots, show your SQL server name and all table names in left explorer pane in Management Studio.

**Submit your project to Blackboard ->Assignments -> Project 1:**

* **Submit the project report in Word:**
  + Since you are submitting Project 2 and 3 together, you can just use one cover page and Table of Content.
  + Place Project 2 answers (i.e. your SQL Server database table structure and data) first, then Project 3 answers (SQL screenshots) next.
* **Also submit:**
  + Logical data model in ERwin format (.erwin) and .ere report at forward engineering.
  + Detach your database in Management Studio when you finish working on project 3, and submit the database file [your database name].mdf to Blackboard.
    - To detach your database, in Management Studio, right click on the database name and click Detach, [your database name].mdf should be under your SQL Server installation / Data/. For example, C:\Program Files\Microsoft SQL Server\MSSQL13.MSSQLSERVER\MSSQL\DATA\AdventureWorks2012\_Data.mdf If you still cannot find it, search your computer by “.mdf”
    - Later if you want to reattach your database file so you can review it, in Management Studio, Right-click “Databases” and click Attach. Then point to the .mdf file located in your computer.
* DO NOT compress the files; instead just submit them as separate files at the same time.
* Failure to adhere to any of the above instructions will result in deduction from the project’s total score.