

CIS 5355  
Assignment # 1  
(20 points)

Due: **By 11:59 pm on Friday, January 28, 2022**

**To be done by each student individually**

**A. Introduction:**

**The instructor expects individual effort on this assignment. This assignment is NOT a group project. Collaboration of any type is not sanctioned and will be treated per the Academic Dishonesty policy as stated in the course syllabus. Each submission will be closely examined for plagiarism.**

You will use the SaleCo database located on the C:\SQL\MATRIX.TXSTATE.EDU\CIS3325 server to formulate and then execute queries in response to the questions listed in the assignment specifications section below. Please do not use any SQL features or SQL query types NOT covered in class or in the textbook. In short, please do not use any advanced SQL features that have not been covered in class or the textbook chapter.

**B. Submission Requirements:**

- a. As a part of this assignment, you will submit **a single pdf document** that will include the formulation of the query in SQL code followed by the output result from the SQL Server database in response to that query. Name the pdf document YourFirstAndLastNameAssignment1.pdf e.g. **MayurMehtaAssignment1.pdf**.
- b. The SQL code for each query should be preceded by a comment. The comment should label the query as 'Query XXX', where XXX is the question number of the question that is being answered by this query e.g. for question 1, the query would be labeled 'Query 1'.
- c. If you are using MS-word or other text editor, make sure to convert the text document to a PDF format. ***PDF is preferred as it facilitates online grading and writing comments.***
- d. An example of the output is illustrated at the end of these specifications. The steps to prepare this PDF document is also presented at the end of these specifications.

**C. Assignment Specifications:** Formulate SQL queries to run against the SaleCo database located on the university-hosted SQL Server DBMS. **Use column aliases, rather than the actual column or field names, where appropriate.**

1. Prepare a list of all employees employed by the company. The list should display only the employee's number, first name, last name, and middle initial in that order.
2. Prepare a list of all vendors that supply products to SaleCo. The list should display vendor's name, contact person's name, state the vendor is located in, and whether the vendor is active or not as indicated by the V\_Order value (a V\_Order value of 'Y' indicates an active vendor. An 'N' indicates an inactive vendor).

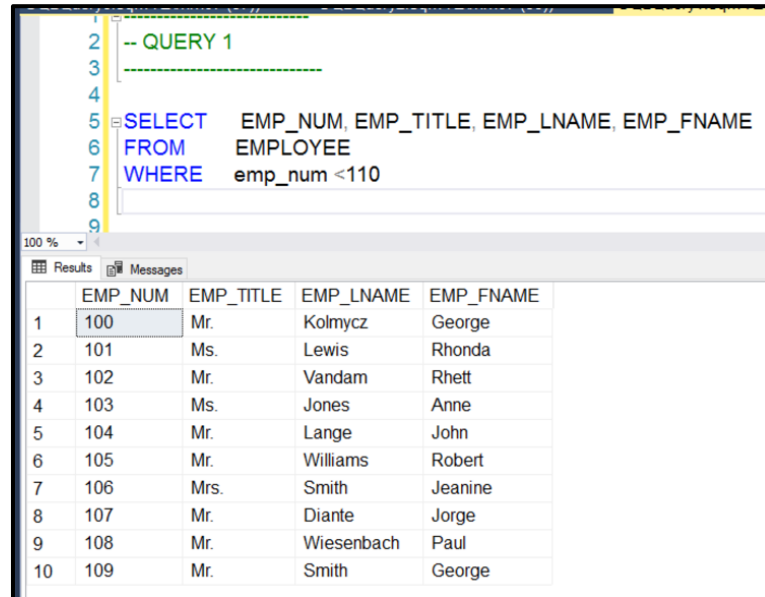
3. Prepare a list of vendors who are located in the state of Tennessee (state abbreviation is TN). List only the vendor's name, contact person's name, state the vendor is located in, and whether or not the vendor is active, in this specified order.
4. Prepare a third list that lists only active vendors in the state of Tennessee. The columns should be listed in the same order as the sequence specified in question # 3 above.
5. Prepare a list of all customers with a balance of \$500.00 or more. The list should display customer code, customer full name (without the middle initial), and balance they owe. Arrange the list in alphabetic order by last name.
6. Prepare a list of all employees who have been with the company **fewer than 5 years**. Display employee number, employee full name based on first and last names, and number of years the employee has been with the company. The list should be arranged from the least number of years with the company to the most.
7. Prepare a list of items purchased on invoice number 1008. The list should include invoice number, product code of purchased item, quantity purchased, and unit price paid for each item. NOTE: The list should only include items from invoice number 1008.
8. Prepare a list of all invoices issued to customer # 10014. List invoice number, customer number, and date issued.
9. Prepare a list of all products with the word 'hammer' in its description. Remember, the is word may appear with other words in the description e.g. claw hammer. Display product code, product description, quantity on hand (QOH) and unit price.
- 10. Challenge Round:** Using the Invoice table, display a count of the number of invoices issued to each customer. The list should appear as follows:

Customer Number	Num of Invoices
10011	3
10012	1
10014	2
10015	1
10018	1

(Continued on the next page)

**D. How to create and submit the query output:**

Sample of a single PDF document to be submitted (or something similar)



The screenshot shows a SQL query window with the following text:

```
-- QUERY 1  
  
SELECT EMP_NUM, EMP_TITLE, EMP_LNAME, EMP_FNAME  
FROM EMPLOYEE  
WHERE emp_num < 110
```

Below the query window, the 'Results' pane displays a table with 10 rows and 5 columns: EMP\_NUM, EMP\_TITLE, EMP\_LNAME, and EMP\_FNAME. The first row is highlighted.

	EMP_NUM	EMP_TITLE	EMP_LNAME	EMP_FNAME
1	100	Mr.	Kolmycz	George
2	101	Ms.	Lewis	Rhonda
3	102	Mr.	Vandam	Rhett
4	103	Ms.	Jones	Anne
5	104	Mr.	Lange	John
6	105	Mr.	Williams	Robert
7	106	Mrs.	Smith	Jeanine
8	107	Mr.	Diante	Jorge
9	108	Mr.	Wiesenbach	Paul
10	109	Mr.	Smith	George

**E. Instructions for creating a PDF Document:**

1. Ensure that your SQL query text and corresponding output results are fully displayed in the SSMS editor window.
2. Capture a screenshot of only the portion of the editor window showing the SQL query text and out results. On Mac, press command+shift+4 keys and then select the portion that you would like to have a screenshot of.
3. Open a blank word document, insert your first and last names at the top of the first page. Following the name, paste the screenshot so that it is fully visible and readable.
4. Repeat steps 1-3 for each query. You may be able to fit two queries to a page otherwise restrict one query and its output to a page.
5. Save the word document as ***YourFirstLastNameAssignment1.docx*** to your disk.
6. Export this word document to a PDF format (Use Save as and then select 'PDF' in file format to save. Save the pdf to your disk as ***YourFirstLastNameAssignment1.pdf***.
7. Upload the pdf file from step 6 to the Assignment section on Canvas.