# **BTD210- Lab 9**

Please work in **groups** to complete this lab. This lab is worth 2% of the total course grade and will be evaluated through your written submission, as well as the lab demo. During the lab demo, group members are randomly selected to present the answers to each of the lab questions. Group members not present during the lab demo will lose the demo mark.

Please submit the following files through Blackboard. Only one person must submit for the team.

* Lab 9.docx

1. Add this declaration on the top of your file.

We, Priya and Muskan, declare that the attached assignment is our own work in accordance with the Seneca Academic Policy. No part of this assignment has been copied manually or electronically from any other source (including web sites) **or distributed to other students.**

1. Specify what each member has done towards the completion of this work:

|  |  |  |
| --- | --- | --- |
|  | Name | Task(s) |
| 1 | Priya | Answers 3-8 |
| 2 | Muskan | Answers 9-14 |
| 3 |  |  |

Download the Lab8\_StoreCo.SQL file. Open Microsoft SQL Server Management Studio. Use *File > Open* to open the above SQL file and *Execute* it. Right Click on Databases in th*e Object Explorer* and click *Refresh*. Confirm that the STORECO database is created.

For the following questions, include

1. The **SQL command**
2. The **output** in text format,
3. **How many rows** are affected.
4. List the store name, last name and first name of all employees working in that store, as shown in sample. Sort by the store name, and then the employee name.

Store Name Employee Name

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Access Junction Johnsson, Elizabeth

Access Junction Mckee, Robert

...

Tuple Charge Williamson, John

SELECT STORE\_NAME AS 'STORE NAME', EMP\_LNAME + ', ' + EMP\_FNAME AS 'EMPLOYEE NAME' FROM STORE, EMPLOYEE WHERE EMPLOYEE.STORE\_CODE = STORE.STORE\_CODE ORDER BY STORE\_NAME, EMP\_LNAME;

Store Name Employee Name

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Access Junction Johnsson, Elizabeth

Access Junction Renselaer, Cary

Attribute Alley Greenboro, Lottie

Attribute Alley Grimaldo, Jeanine

Attribute Alley Jones, Rose

Attribute Alley Rosenberg, Andrew

Attribute Alley Rosten, Peter

Attribute Alley Smith, Sherry

Database Corner Eindsmar, Jack

Database Corner Ratula, Nancy

Database Corner Washington, Alan

Primary Key Point Archialo, Barry

Primary Key Point Olenko, Howard

Primary Key Point Rumpersfro, Jennie

Tuple Charge Broderick, Tom

Tuple Charge Ogallo, Roberto

Tuple Charge Smith, Robert

Tuple Charge Smith, Peter

Tuple Charge Williamson, John

(19 rows affected)

1. Apply the following changes:
   1. Set the store code of the employee with employee code 20 to 6.
      1. UPDATE EMPLOYEE SET EMP\_CODE = '20', STORE\_CODE = '6' WHERE EMP\_CODE = '20';
      2. EMP\_CODE EMP\_TITLE EMP\_LNAME EMP\_FNAME EMP\_INITIAL EMP\_DOB STORE\_CODE

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1 Mr. Williamson John W 1964-05-21 3

2 Ms. Ratula Nancy 1969-02-09 2

3 Ms. Greenboro Lottie R 1961-10-02 4

4 Mrs. Rumpersfro Jennie S 1971-06-01 5

5 Mr. Smith Robert L 1959-11-23 3

6 Mr. Renselaer Cary A 1965-12-25 1

7 Mr. Ogallo Roberto S 1962-07-31 3

8 Ms. Johnsson Elizabeth I 1968-09-10 1

9 Mr. Eindsmar Jack W 1955-04-19 2

10 Mrs. Jones Rose R 1966-03-06 4

11 Mr. Broderick Tom 1972-10-21 3

12 Mr. Washington Alan Y 1974-09-08 2

13 Mr. Smith Peter N 1964-08-25 3

14 Ms. Smith Sherry H 1966-05-25 4

15 Mr. Olenko Howard U 1964-05-24 5

16 Mr. Archialo Barry V 1960-09-03 5

17 Ms. Grimaldo Jeanine K 1970-11-12 4

18 Mr. Rosenberg Andrew D 1971-01-24 4

19 Mr. Rosten Peter F 1968-10-03 4

20 Mr. Mckee Robert S 1970-03-06 6

21 Ms. Baumann Jennifer A 1974-12-11 3

* + 1. (1 ROW AFFECTED)
  1. Set the store code of the employee with employee code 21 to NULL.
     1. UPDATE EMPLOYEE SET EMP\_CODE = '21', STORE\_CODE = NULL WHERE EMP\_CODE = '21';
     2. EMP\_CODE EMP\_TITLE EMP\_LNAME EMP\_FNAME EMP\_INITIAL EMP\_DOB STORE\_CODE

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1 Mr. Williamson John W 1964-05-21 3

2 Ms. Ratula Nancy 1969-02-09 2

3 Ms. Greenboro Lottie R 1961-10-02 4

4 Mrs. Rumpersfro Jennie S 1971-06-01 5

5 Mr. Smith Robert L 1959-11-23 3

6 Mr. Renselaer Cary A 1965-12-25 1

7 Mr. Ogallo Roberto S 1962-07-31 3

8 Ms. Johnsson Elizabeth I 1968-09-10 1

9 Mr. Eindsmar Jack W 1955-04-19 2

10 Mrs. Jones Rose R 1966-03-06 4

11 Mr. Broderick Tom 1972-10-21 3

12 Mr. Washington Alan Y 1974-09-08 2

13 Mr. Smith Peter N 1964-08-25 3

14 Ms. Smith Sherry H 1966-05-25 4

15 Mr. Olenko Howard U 1964-05-24 5

16 Mr. Archialo Barry V 1960-09-03 5

17 Ms. Grimaldo Jeanine K 1970-11-12 4

18 Mr. Rosenberg Andrew D 1971-01-24 4

19 Mr. Rosten Peter F 1968-10-03 4

20 Mr. Mckee Robert S 1970-03-06 6

21 Ms. Baumann Jennifer A 1974-12-11 NULL

* + 1. (1 ROW AFFECTED)
  1. Insert a new store into the store table with the following description:
     1. INSERT INTO STORE (STORE\_CODE,STORE\_NAME,STORE\_YTD\_SALES,REGION\_CODE,EMP\_CODE) VALUES (7, 'Virtual Store', 0, 2, 1);
     2. STORE\_CODE STORE\_NAME STORE\_YTD\_SALES REGION\_CODE EMP\_CODE

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1 Access Junction 1003456 2 8

2 Database Corner 1421987 2 12

3 Tuple Charge 986783 1 7

4 Attribute Alley 944569 2 3

5 Primary Key Point 2930098 1 15

7 Virtual Store 0 2 1

* + 1. (1 rows affected)

STORE\_CODE STORE\_NAME STORE\_YTD\_SALES REGION\_CODE EMP\_CODE

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7 Virtual Store 0 2 1

1. Find the store codes that are in the employee table but not in the store table.
   1. SELECT STORE\_CODE FROM EMPLOYEE WHERE STORE\_CODE NOT IN (SELECT STORE\_CODE FROM STORE);
   2. STORE\_CODE

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6

* 1. (1 row affected)

1. Find the store codes that are in the store table but not in the employee table.
   1. SELECT STORE\_CODE FROM STORE WHERE STORE\_CODE NOT IN (SELECT STORE\_CODE FROM EMPLOYEE);
   2. STORE\_CODE

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* 1. (0 rows affected)

1. Find the number of distinct store codes that the employees are assigned to? Does this count the NULL entry?
   1. SELECT COUNT (DISTINCT STORE\_CODE) AS 'EMP\_CODE' FROM STORE;
   2. EMP\_CODE

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6

* 1. (1 row affected)

1. Use inner joins to list the region codes and the number of employees working in each region. Does this include all employees?

SELECT region\_code, COUNT(\*) AS "Number of employees"

FROM REGION group by REGION\_CODE

Region code Number of employees

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1 1

2 1

(2 rows affected)

1. Change the code for the previous query to include all 21 employees in the list, as shown in the following sample.
   1. SELECT region.region\_code, employee.emp\_code COUNT FROM REGION, EMPLOYEE group by REGION\_CODE + emp\_code;

REGION\_CODE #employees

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NULL 2

1 8

2 11

1. List ALL employees’ first name, last name, store name, and region description. Your output should have 21 rows. Sort by the region description, then the store name, and then the employee last name, as shown in the following sample.

EMP\_FNAME EMP\_LNAME STORE\_NAME REGION\_DESCRIPT

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Jennifer Baumann NULL NULL

Robert Mckee NULL NULL

...

Alan Washington Database Corner West

SELECT EMP\_FNAME, EMP\_LNAME, STORE\_NAME, REGION\_DESCRIPT FROM EMPLOYEE, STORE, REGION WHERE EMPLOYEE.STORE\_CODE = STORE.STORE\_CODE AND STORE.REGION\_CODE = REGION.REGION\_CODE ORDER BY REGION\_DESCRIPT, STORE\_NAME, EMP\_LNAME;

EMP\_FNAME EMP\_LNAME STORE\_NAME REGION\_DESCRIPT

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Barry Archialo Primary Key Point East

Howard Olenko Primary Key Point East

Jennie Rumpersfro Primary Key Point East

Jennifer Baumann Tuple Charge East

Tom Broderick Tuple Charge East

Roberto Ogallo Tuple Charge East

Robert Smith Tuple Charge East

Peter Smith Tuple Charge East

John Williamson Tuple Charge East

Elizabeth Johnsson Access Junction West

Robert Mckee Access Junction West

Cary Renselaer Access Junction West

Lottie Greenboro Attribute Alley West

Jeanine Grimaldo Attribute Alley West

Rose Jones Attribute Alley West

Andrew Rosenberg Attribute Alley West

Peter Rosten Attribute Alley West

Sherry Smith Attribute Alley West

Jack Eindsmar Database Corner West

Nancy Ratula Database Corner West

Alan Washington Database Corner West

(21 row(s) affected)

1. List all store codes, store names as well as their managers’ last names.

SELECT STORE.STORE\_CODE, STORE\_NAME, EMP\_LNAME FROM STORE , EMPLOYEE WHERE STORE.EMP\_CODE = EMPLOYEE.EMP\_CODE ;

STORE\_CODE STORE\_NAME EMP\_LNAME

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4 Attribute Alley Greenboro

3 Tuple Charge Ogallo

1 Access Junction Johnsson

2 Database Corner Washington

5 Primary Key Point Olenko

(5 row(s) affected)

1. List ALL employee codes, last names, and manager last name, as shown in the following sample.

Code Employee Manager

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1 Williamson Ogallo

2 Ratula Washington

...

21 Baumann NULL

1. Download and run Lab9\_Agent.sql to create the AGENT table with a recursive relationship. Create a view named SUPERVISOR that lists all agent codes, agent names, supervisor’s code and supervisor’s name.

CREATE VIEW SUPERVISOR AS

SELECT AA.A\_CODE AS AGENTCODE, AA.A\_FNAME AS AGENTNAME, BB.A\_CODE AS SUPERVISORCODE , BB.A\_FNAME AS SUPERVISORNAME FROM AGENT AA, AGENT BB

WHERE AA.S\_CODE = BB.A\_CODE;

1. Select all rows from SUPERVISOR view sorted by the supervisor’s code, as in the following sample:

AGENT Code AGENT Name Supervisor Code Supervisor Name

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1 John 1 John

2 Nancy 1 John

...

16 BARRY 5 ROBERT

SELECT \* FROM SUPERVISOR ORDER BY SUPERVISORCODE;

AgentCode AgentName SupervisorCode SupervisorName

----------- --------------- -------------- ---------------

1 John 1 John

2 Nancy 1 John

4 Jennie 1 John

6 Cary 1 John

8 Elizabeth 1 John

20 Robert 1 John

12 Alan 2 Nancy

9 Jack 2 Nancy

3 Lottie 2 Nancy

5 Robert 3 Lottie

7 Roberto 3 Lottie

13 Peter 3 Lottie

21 Jennifer 3 Lottie

11 Tom 3 Lottie

17 Jeanine 4 Jennie

18 Andrew 4 Jennie

19 Peter 4 Jennie

14 Sherry 4 Jennie

10 Rose 4 Jennie

15 Howard 5 Robert

16 Barry 5 Robert

(21 rows affected)