Lab 9: SQL Insert, Update, and Delete

CS355/CE373 Database Systems Fall 2023



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1 Instructions

- This lab will contribute 1% towards the final grade.
- The deadline to submit this lab is at the end of your lab.
- The lab must be submitted online via CANVAS. The SQL file should be named as $Lab_09_aa01234.sql$ where aa01234 will be replaced with your student id. Files which don't follow the appropriate naming convention will not be graded.

1.1 Marking scheme

This lab will be marked out of 100.

- 50 Marks are for completion of the lab.
- 10 Marks are for filling the feedback form within the lab timings.
- 40 Marks are for progress and attendance during the lab.

1.2 Late submission policy

No late submissions are allowed.

2 Objective

This lab activity is prepared on Northwind Sample Database of SQL Server. The database will be analyzed for the following SQL constructs:

- Insert
- Update
- Delete

3 Query Syntax Examples

```
01 | -- Insert
02 | drop table test
03 | Create table test (testid int identity (1,1), testname varchar(20),
         testdate
04 | datetime, testnumber int)
05 | select * from test
06 | --Insert Into Region(regionid, regiondescription) Values (5, 'Central')
07 | Insert into test (testname, testdate, testnumber) values
08 | ('aaaa', getdate(), 123)
09 | Insert into test (testname, testdate) values ('aaaa',getdate())
10 | Insert into test (testname, testdate, testnumber)
11 | values ('aaaa', (select min(orderdate) from orders), 123)
12 | Select @@Identity
13 | select scope_identity()
     Insert Into test(testname, testdate, testnumber)
     Select CustomerID, OrderDate, OrderID from Orders
     select * from test
17 |
     --Update
18 |
     Update test
     Set testName ='xyz',
19 |
20 \mid testnumber = 5
21 | Where testID < 10
22 | Update Test
```

```
23 | Set testNumber = EmployeeID,
24 | testName = 'test' + cast(testid as varchar(3))
25 | From Orders
26 | Where Orders.orderid = testNumber
27 | --Delete
28 | Delete Test
29 | Where TestID <= 10
30 | Delete Test
31 | Where TestNumber in (10253,10254)
32 | Delete Test
33 | Where TestNumber in (select orderid from orders where customerid = 'ALFKI')
34 | delete test
35 | from employees
36 | where testid = employeeid
```

4 Exercises

The ERD Diagram for the Northwind Database is as shown in Figure 1.

- 1. Insert a new product with following details.
 - Product ID = 2050
 - Product Name = 'Mountain Dew'
 - Category ID = 1
 - Unit Price = 10
- 2. Insert a new product with following details.
 - Product ID = 2051
 - Product Name = 'Tea'
 - Category ID = Category of 'Beverages'
 - Unit Price = 10
- 3. Increase the price of products in 'Beverages' category by 25%.
- 4. Insert a new category titled 'Drinks'.
- 5. Insert all products belonging to category 'Beverages' to category 'Drinks' too.
- 6. Move all products of category 'Beverages' to category 'Drinks'.
- 7. Update records so that the employee 'Nancy Davolio' is assigned same territories as that of 'Robert King'.
 - (a) Delete existing territory assignments of 'Nancy Davolio'.
 - (b) Insert new assignments.
- 8. Delete Products of category 'Seafood' having amount < 5 in Products.
- 9. Delete all orders of CustomerID 'ALFKI'.
- 10. Delete all orders that have been shipped in Aug, 1996.

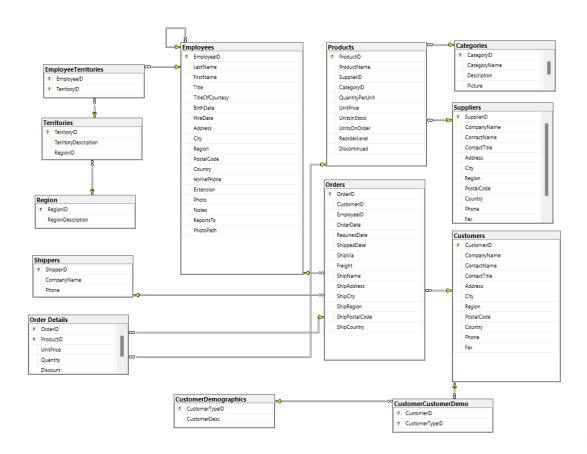


Figure 1: Northwind Database ERD