Lab 8: Database Design III - CRUD (8% of total grade)

Submission: Use the included .sql file to put your answers in, then upload only the SQL file to Blackboard (Assessments > Lab 8 - Database Design III CRUD).

Name your file: HTTP5126-L8-CRUD-*LastNameFirstName*.SQL, replace *LastNameFirstName* with your name as displayed in Blackboard.

Purpose: To practice CRUD functionality using SQL.

Requirements: For this assignment, you will use the provided Entity Relationship Diagrams to create tables and then use SQL to alter or delete some of those tables.

NOTE: Run your queries on your database to make sure desired results are achieved. Also import and execute your sql file to ensure it runs all your queries before submitting. Each letter of each part should contain a single query.

Pre-Lab:

1. Start your mySQL server and open phpMyAdmin or Adminer.
2. Create a database for this lab (eg. http5126_lab8). Set the collation as utf8_unicode_ci.
3. You will begin this lab with an empty database.

Part 1: [C]reate (2.5%)

Use SQL to create the tables defined by the Entity Relationship Diagrams(ERDs). The ERDs are located in the Appendix on the last page of this lab.
Ensure your CREATE TABLE query includes all the columns, data types, keys, and constraints defined by the ERD. In part 2, when inserting data, the id primary keys should be populated automatically, where applicable.

A. Create the customer table. [0.5%]
B. Create the supplier table. [0.5%]
C. Create the order table. [0.5%]
D. Create the product table. [0.5%]
E. Create the order_product table. [0.5%]

Part 2: Insert (2.5%)

Use SQL to insert data for each table. Use the data from part 2 of the Appendix.

A. Insert the data for the customer table. [0.5%]
B. Insert the data for the supplier table. [0.5%]
C. Insert the data for the order table. [0.5%]
D. Insert the data for the product table. [0.5%]
E. Insert the data for the order_product table. [0.5%]

Part 3: [U]pdate (1.5%)

A. Alter the product table by adding a constraint to the price column that checks for all new products to have a price value equal to or over 0. [0.75%]
B. Jane meant to order the Canon Camera instead of the Apple Smartphone, update the order_product table to reflect this change. [0.75%]

Part 4: [D]elete (1.5%)

A. John's orders have been delivered, delete rows from the order_product table that are related to John. [0.75%]
B. Also delete rows from the order table that are related to John. [0.75%]

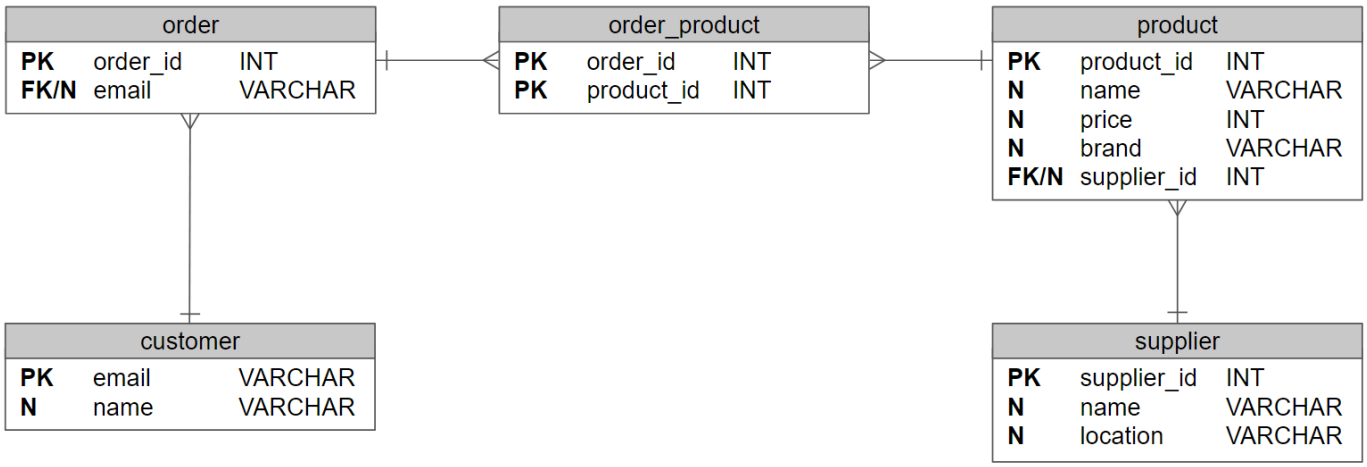
Bonus (0.5%)

Delete the supplier table and supplier_id column from the product table. You will need to find the name of the foreign key constraint then use it to drop the foreign key constraint on the supplier_id column in the product table. You should submit these 3 queries:

A. Dropping the constraint
B. Dropping the supplier_id column from the product table
C. Dropping the supplier table

Appendix

Part 1: Use the Entity Relationship Diagram below to complete Parts 1A to 1E



Part 2: Use the data in the tables below to populate your created tables from Part 1

order_id (PK)	email (FK)
1	john@gmail.com
2	jane@gmail.com
3	john@gmail.com
4	alice@gmail.com

order_id (PK)	product_id (PK)
1	1
2	2
2	3
3	4
4	5

product_id(PK)	name	price	brand	supplier_id (FK)
1	Laptop	800	Dell	1
2	Smartphone	600	Apple	2
3	Smartphone	600	Samsung	2
4	Camera	300	Canon	1
5	Chair	100	Herman Miller	3

email (PK)	name
john@gmail.com	John
jane@gmail.com	Jane
alice@gmail.com	Alice

supplier_id (PK)	name	location
1	XYZ Electronics	Toronto
2	ABC Gadgets	Montreal
3	XYZ Furniture	Vancouver