

## INST 327 – Database Design and Modeling

### Assignment 2 - Due: Monday, February 25, 2018, 11:59 PM

#### Questions

##### Q.1) (15 points)

Write 2 queries to create copies of the addresses and orders tables. Name them address\_copy and order\_copy

To allow for repeated clean executions of your script, precede the CREATE TABLE statements with DROP TABLE statements. To ensure that the script will run cleanly even when the tables have not yet been created, use the IF EXISTS feature of the DROP statement.

**Q.2) (20 points)** Write an INSERT statement that adds the following data to the addresses table. Code the INSERT statement such that MySQL automatically generates the address\_id column.

customer\_id: 6  
line1: 12765 Jefferson Str.  
line2: Apt 217  
city: College Park  
state: MD  
zip\_code: 20742  
phone: 301-217-8888  
disabled: 0

**Q.3) (20 points)** Write an INSERT statement using a column list to add this row to the orders table. Pay careful attention to the comments below.

order\_id: /\*The next automatically generated ID\*/  
customer\_id: 6  
order\_date: /\*Assume the order is taken on September 25, 2017, at 11:35:18 AM \*/  
ship\_amount: 5  
tax\_amount: 0  
ship\_date: /\*Do not hard code the date and time; use a function that will  
insert the date and time at the moment when the record is added. \*/  
ship\_address\_id: /\* Hard-code the address\_id value of the record added in Q.2 \*/  
card\_type: Visa  
card\_number: 1234567890123456  
card\_expires: 06/2020  
billing\_address\_id: 8

**Q.4) (15 points)** Write an UPDATE statement that modifies two columns within the row that you added in Question 3 above. This statement should change the **tax\_amount** column to **4.20** and should change the **card\_type** to **Mastercard**.

**Q.5) (15 points)** Write an UPDATE statement for the addresses table: set the **disabled** column to **1** for all addresses in the state of CA.

**Q.6) (15 points)** Write a DELETE statement that deletes the row that you added to the addresses table in Question 2 above. Note that deleting the address record that was added in Q2 will leave the order record added in Q3 an "orphan", since the ship\_address\_id of the record will point to an address that does not exist in the database anymore. To eliminate the orphan record problem, precede the DELETE statement with another DELETE statement that deletes all rows in orders that were shipped to that address.

*Hints:*

- *Remember that to code two or more statements in a script, you must end each statement with a semicolon.*
- *You need to turn Workbench's "Safe Updates" option off before you can run these DELETE queries. See the lecture slides for instructions; you must include this in the script that you submit.*