

**CPSC 408: Database Systems**  
**Assignment #4**  
**Due: April 29th, 2016 11:59pm**

**Overview:**

For this assignment you will create an application (command line or GUI) that manages inventory, customers and orders for a retail store. The database will be stored in a normalized MySQL Database.

Your program will allow the user to add new products into inventory, create orders, add new customers etc. Each new product should have a unique identifier (INT), a description, a price, and an initial inventory quantity. Please create the necessary tables/columns for the tables for products, orders and customers. \*\*Extra Credit may be given if extra tables and/or features are added to the application.

Once the database has been designed the application will have the following options:

- 1) Print the description, price, and quantity for a provided product ID
- 2) Create a new order (an order consist of a customer , a product and quantity# of items)
- 3) Print the price and description for a given order
- 4) Print the order description for a given customer
- 5) Print the item count and order total for all customers.
- 6) Print the item count and order total per customer with a total greater than \$100.
- 7) Print the total revenue for all products.
- 8) Print the top 5 selling products by revenue.
- 9) Print the top 5 selling products by volume (total count).
- 11) Insert new products
- 12) Update inventory count for specific item
- 13) Update the item description
- 14) Delete items from inventory
- 15) Exit

When creating an order, if you do not have enough of an item in stock you should warn them and ask them for a new quantity.