### CSCI 3901: SOFTWARE DEVELOPMENT CONCEPTS

#### **ASSIGNMENT 6**

## Problem1

Designing database schema and making changes to it.

# **Classes and Interface:**

- Mainclass In this class I have implemented the various methods of interface – ship\_order,issue\_order and receive order
- <u>Inventory control</u> This is the given interface with various methods which was to be implemented
- My Identity: contains database setup
- Order Exception: to throw exceptions

# **Data Structures Used:**

- HashMap
- Array
- ArrayList

# Librariers and jar used:

mysql-connector-java-8.0.19.jar

## **Argument:**

- 1.I have implemented the solution as per requirement of the customer
- 2. My solution throws Exceptions as per conditions like if there is not sufficient stock to ship. So raising exceptions make it better understandable. Also if order is already shipped then it throws exception or if we pass an order id which does not exist or is invalid or if shipped date is not null (already shipped) or order is already received

So my sol gives exceptions on various conditions that are not valid which helps the customer for better understanding

- 3. Also for storing the data I have used various data structures like Hashmap, Array List which makes it easy to retrieve the data and update tables
- 4. I have used simple sol queries like joins which helps in better understanding and provide a simple and flexible sol
- 5. My sol updates various columns as per req as if we have to update units in order, units in stock, Reorder Level. Aslo updating shipped date, arrived date and other fields make my sol simple to understand and implement