**CT230 DATABASE SYSTEMS**

**ASSIGNMENT: 4**

**LAB DATES: 23RD 25TH AND 26THOCTOBER 2018**

**Due:** (via Blackboard) by Friday 2nd November 2018

*there is a penalty for late submissions*

**Learning Outcomes:** To become familiar with:

- Aggregate functions(min, max, sum, avg, count)
- Subqueries
- SQL GROUP BY and HAVING clauses

**Goal:** This assignment involves the **querying** of the tables (reading data from the tables) from the book domain.

* Please note that it is good practice to write your query using the schema given before typing in and running in MySQL.

## SCHEMA:

**author(**aID, fName, surname**)**

**book(**isbn, title, authorID, genre, pubYear, publisher, rrPrice, avgRating**)**

**bookShop(**shopNo, shopName, street, city, county**)**

**orders(**orderNo, sNo, oDate, salesRep**)**

**orderDetails(**oNo, bookISBN, quantity**)**

## TASKS: Write SQL Select Queries for the following:

1. Find the number of orders taken by the sales representative Jar Lee.
2. Find the book(s), listing the book title, publication year (pubYear) and avgRating, which have the lowest rating (avgRating).
3. Find the book(s), listing the title, publication year (pubYear) and quantity ordered, which were ordered in the highest quantity.
4. List the title, genre, author and price of books whose price (rrPrice) is greater than the average price of all books.
5. Using a sub-query approach, list the names of the Galway-based shops from whom the sales representative Zoe Smith has taken orders.
6. List the names of the publishers, and the number of books published, for publishers who have published 3 or more books.

## HAND UP:

1. For each query include the SQL code (one screenshot of code only) and a screenshot of the results in your solution. To aid correction, please keep the SQL query code and the associated output (results) together (near each other) and label correctly (1-6).

2. Follow the assignment template guidelines given and ensure that all the specified outputs, the plagiarism declaration and the timestamp/database query name are included.