

University of Belize
Department of Mathematics, Physics, & Information
Technology
CMPS1171 - Introduction to Databases
Quiz 3

NOTE: Create a file named solution.sql to save your SQL code in.

1. log in to the week 7 database that you created before or create it. Open the **library.sql** file and insert five rows of data into the **book** table and five rows of data into the **author** table. **[20 points]**
2. A book can be written by one or more authors and an author can write one or more books, so this means that there is a **many-to-many** relationship between books and authors. Create a linking table named **book_author** that establishes this **many-to-many** relationship between the **book** table and the **author** table. **[20 points]**
3. Insert at least ten rows of data into the **book_author** linking table, ensuring there are many-to-many relationships between books and authors. **[10 points]**
4. Write a query to find for each book, the list of the authors of that book. **[25 points]**
5. Using the data from the **gpa.sql** file, use subqueries to group the students by gender and then determine which gender has the maximum number of students. For example, if there are 100 females and 200 males, your final query should return **200**. Your answer should be a single value. In our case we know that there are 2 females and 1 male, so our answer should be **2**.
HINT: The **MAX()** aggregate function should be used in the final query. Also there is no need for a **JOIN** since everything we need is in the student table. **[25 points]**