## University of Belize Department of Mathematics, Physics, & Information Technology

## CMPS1171 - Introduction to Databases Project 1

NOTE: Create two file named project\_tables\_data.sql and project\_queries.sql

**PROBLEM STATEMENT:** You are tasked with designing and implementing a database for an application that keeps track of musical venues(physical location), artists(performers), and shows(actual performances). A show has participating artists and will be performed at a specified venue. Below is some of the needed fields. You will have to add a few more fields.

- Artist information include name, genre(Jazz, Rock, Rap, etc.), address, phone, email, etc.
- Venue information include name, address, contact phone, etc.
- Show information include name, start\_date, end\_date, price, description(summary), etc.

## **ASSUMPTIONS:**

- An artist can only have one genre.
- The venues are all in Belize.
- A show can have multiple artists.
- The Shows table relies on the other two tables to get some of its data such as venue information and artist information.

Create and then login to a database named **music**. The password for the **music** role that your created should be **\$swordfish\$** 

- 1. Using the information above in the problem statement and the assumptions, create the appropriate tables that the system will use. Read the assumptions very carefully, so that you can determine whether there are any one-to-many and many-to-many relationships between the information presented. If there is a need for linking-tables, then you are responsible for creating them. Place all your tables including any linking tables in the project\_tables\_data.sql file. [25 points]
- 2. Insert ten rows of data into each of the tables that you created in problem one above. Place these inserts in your project\_tables\_data.sql file. You can now go ahead and load your project\_tables\_data.sql file into the music database to create the tables and populate them with data. [10 points]

NOTE: All the queries below are to be placed in the project\_queries.sql file. No queries should be typed at the command line.

- **3.** Write a query to find for each show, the artists who are performing at that show. I do not want to see any ids in the query results. [7 points]
- **4.** Write a query to find the district which has the most venues. I do not want to see any ids in the query results. [7 points]
- **5.** Write a query to find for each venue, the shows that are performed there. I do not want to see any ids in the query results. [7 points]
- **6.** Write a query to find the district where the most artists live. I do not want to see any ids in the query results. [7 points]
- 7. Write a query to find the most expensive show and when and where that show occurred. I do not want to see any ids in the query results. [7 points]