SQL Database Tutorial

<u>Tables</u>

- Coronavirus Data by Country
  - o Columns
    - ▪ Date
    - ▪ Country
    - ▪ Total Confirmed
    - ▪ Total Recovered
    - ▪ Total Deaths
- Coronavirus Data by World
  - o Columns
    - ▪ Date
    - ▪ Total Confirmed
    - ▪ Total Recovered
    - ▪ Total Deaths
    - ▪ Infection Growth Rate
- Coronavirus patient statistics such as country, state/city, age, and gender
  - o Columns
    - ▪ City/State of Diagnosis
    - ▪ Country of Diagnosis
    - ▪ Gender of Patient
    - ▪ Age of Patient
  - o The city/state column is abbreviated to "City" but represents the usage of both categories
    - ▪ i.e. Foreign cities and provinces are within this list, as well as some states of the US such as Wisconsin

<u>Instructions (In Order)</u>

Download the Files

1. Download the database files from canvas supplied by the professor
2. Place them wherever you would like on your computer, just make sure to remember the location
3. You have now downloaded the needed files

Create the Database

1. Open NetBeans and create a java derby database
2. Use the username APP and password APP for your database
   a. Important for future steps
3. Your database has now been created

Create Tables

1. Right click on the tables folder inside your database and select "Recreate Table"
2. Select one of the files with the "grab" extension

3. Select Ok, and then repeat until you have all 3 tables
4. You now have all 3 tables in your database

Inserting Data

1. Open the text file named after the appropriate table you want to insert into
   a. For the countries table, open both text files
2. Use the select all shortcut (Ctrl+A) on the text file and copy the code (Ctrl+C)
3. Go to NetBeans, right click the table, and select "View Data"
4. Delete the placeholder line that reads the first 100 rows of data
5. Paste the code into the SQL coding area
6. Run the SQL Code
   a. This may take a while, but just be patient and it should work
   b. For the countries table, you will need to then delete your pasted code once finished, and then copy paste the second portion of code and run it
7. Your table now has the correct data

Important Notes

The data provided is only up to April 20th, and some data sets are limited in content due to lack of sources for such data. Many sources provide data that only lists the confirmed, recovered, and death counts of countries and/or the world. There are only a few datasets that specify ages and gender; however, they simply list patients who have had COVID-19 and have agreed to have this data in the table. As such, the data seen in some of these tables may not represent the entire statistical value of infection possibility and total counts of confirmed, recovered, and dead. If possible, I may add an additional group of code that will add the counts of confirmed, recovered, and dead up to a more recent date. I would expect, however, to only have the current data seen in the age and gender table for such statistics. If you would like a more specific statistic on the infection chance and rate of specific areas, you would likely find such data in reports rather than tables/datasets.