SQL Exercise 1

Deadline: Midnight Monday 27th February 2023

Follow the below instructions to access your SQL database on macneill and complete the exercise. Details of VPN access are here:

https://support.scss.tcd.ie/wiki/VPN_connection_from_Windows_10 -_students

Nnb. Make sure to **only use the SQL tab** as instructed and not to manually edit any part of the tables you create (via other tabs). This is tracked by the system and parts of the exercise done using other tabs will receive a zero mark. This is not to punish anyone, it is simply required for the assignment, so follow the instructions correctly and ask if you have questions.

To access your lab database:

- 1 Log in to your account on <u>macneill.scss.tcd.ie</u> using the username and password emailed to you.
- 2 Click on the database available there, its name will contain your username and end in _db

Inputting an SQL Command:

- 1 Click on the SQL tab
- 2 Type your SQL command
- Click "Go". You should see something like this, if not don't panic, just edit your sql command and try again:

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0444 seconds.)

- 4 Click the SQL tab again
- 5 Type your next command and so on to complete all of the tasks below.

Task 1: Creating and finding information in a MySQL Database

1 Create a table called Customers with the appropriate primary key, only post code, address and contact name are allowed to be null and all strings using the varchar(255) data type. Also note the Post code is best represented as a string.

)	CustomerName	ContactName	Address	City	PostalCode	Country
1	Jim Moore	James Moore	Frederick Street	Berlin	12209	Germany
2	Jane Smith	Jane Smith	Kevin Street	Mexico D.F.	12207	Mexico
3	Lucille Connors	Lucille Connors	Tpwnsend Street	Mexico D.F.	12207	Mexico
4	Phil Nolan	Philip Nolan	Sundale Road	London	WA1 1DP	UK
5	Veronica Green	Veronica Green	Shipyard Lane	Lulea	S958 22	Sweden

2	Insert the above data into the Customers table				
3	Return all data in the Customers table.				
4	Select all the different values from the Country column in the Customers table.				
5	Select all records where the City column has the value "Berlin".				
6	Select all records where the City column has the value 'Berlin' and the PostalCode column has the value 12209.				
7	Select all records from the Customers table, sort the result alphabetically by the column City.				
8	Insert another customer into the Customers table called Cardinal who lives in Stavanger, Norway.				
9	Select all records from the Customers where the PostalCode column is empty				
10	Select all records from the Customers where the PostalCode column is not empty				
11	Set the name of anyone who lives in the UK to John Smith				
12	Delete anyone in the table with postal code 12209				
13	Return the name of all countries in the Customers table with (no countries repeated in the list) that contain the letter 'e' and in alphabetical order.				

A note on marking: You will receive a number of similar tasks during the semester, each is worth a small percentage totalling 25% of your overall mark. Each will be marked as pass (full marks) or fail (zero marks).

Your use of the macneill server is logged so please do not do anything there that is not part of the assignment. If you need access to a MySQL database for other reasons, please come and talk to me.

Make sure to only edit your database using the SQL tab.