References:

NOTE: This guide covers the very basics of MySQL functions and can be further altered to specify other uses. For example, you can delete all the information in a table, but by changing the table name to a column name you can delete just the columns. For a simple understanding and further examples, please go to https://www.w3schools.com/MySQL/default.asp

What is MySQL?

- **A relational database:** storing data in multiple tables that connect to one another (i.e what separates databases/tables are the contents they store)
- **A structured database:** organized and digestible data.
  (i.e each row and column representing specific data that should not be changed)
  (example: if the format is email: ?, id: ?, name: ?, you should not replace nor swap these tags in future added data)
- **Case sensitivity:** There is no case sensitivity. (i.e test = TEST)

Installing MySQL:

1. Visit https://dev.mysql.com/doc/mysql-getting-started/en/#mysql-getting-started-other-tasks and go to ***Installing and Starting MySQL***. Find the platform you use.
2. *For windows*, visit https://dev.mysql.com/doc/refman/5.7/en/windows-installation.html#windows-installation-simple and go to ***MySQL Installer Method***. Download the bottom link (more total downloads and doesn't have web in the sub-title)
3. Ignore the account signup - or don't - and click on the link "No thanks, just start my download" at the bottom.
4. Open the installer and choose the developer setup option. (If you know exactly what you need to download from MySQL, you can choose the custom option). **REMEMBER file location.**
5. Keep everything default. (Or don't) When prompted, **CREATE A PASSWORD** and save/memorize it.
6. Find the file and open the "MySQL WorkBench" application.(For convenience, pin to taskbar and start)
7. Begin configurations and setup if not done already.

Making A Database:

help = temporary/example name

- **Creating a database:** CREATE DATABASE help;

- **Deleting a database:** DROP DATABASE help;

- **Creating a table:** CREATE TABLE help(id int, last name char(255))

- **Deleting a table:** DROP TABLE help(id int, last name char(255))

- **Add a column to a table:** ALTER TABLE help
  ADD (NAME OF COLUMN) (DATATYPE)

- **Remove a column to a table:** ALTER TABLE help
  DROP COLUMN (NAME OF COLUMN)

- **Change a column datatype:** ALTER TABLE help
  MODIFY COLUMN (NAME OF COLUMN) (NEW
  DATATYPE)

Information In A Database:

- **Return information in a table:** SELECT * FROM help;

- **Return specific columns in a table:** SELECT column1, column2
  FROM help;

- **Insert information into table:** INSERT INTO help (col1, col2, col3)
  VALUES (val1, val2, val3)
- **Changing information in table (row):** UPDATE help
  NOTE: Good practice to have id col   SET (COLUMN NAME) = (NEW INFO)
  WHERE (COL NAME) = (ID IN TABLE)

- **Delete information in table (row):** DELETE FROM help WHERE (COL NAME);

- **Delete everything (rows) except for column name:** DELETE FROM help;