**SQlite**

**How to Begin**

1. Navigate to the Sqlite Downloads page: <https://www.sqlite.org/download.html>
2. Select the proper zip file for your computer system (Either the 64 Bit windows file or the Mac-OS version) and this should download the file. Double click it to open it in your downloads file.
3. In an accessible location, create an empty file in your computer for the files to be extracted to.
4. Right click on the zip file you downloaded to your computer (it was likely downloaded to your **Downloads** folder), there should be an **Extract All** button. Select the folder which you created as the destination for the extraction.
5. Open your terminal and navigate to the folder with the sqlite files in it. Do this by clicking the top bar inside your folder, and pressing Ctrl-C. Then go back to your terminal and enter: cd \*, the \* being the address you just copied.
6. Now that you’ve navigated to the file, enter: sqlite3
7. If the terminal returns:

**SQLite version 3.24.0 2018-06-04 19:24:41**

**Enter ".help" for usage hints.**

**Connected to a transient in-memory database.**

**Use ".open FILENAME" to reopen on a persistent database.**

**sqlite>**

Then the setup has been successful!

**Useful Tip: You can download this useful GUI for sqlite to make it more intuitive. It just makes everything visual rather than being based on terminal commands. This is the link: https://sqlitestudio.pl/index.rvt**

**Basic Commands and Actions**

1. You can run sqlite from whatever file in your terminal, but if you create any database, or try to edit that database, you need to have navigated towards where those databases’ are located.
2. To create a database:
   1. Start in the folder you want the database to reside using the cd command
   2. Enter the command: sqlite3 DATABASENAME.db
      1. This will create and name the database
   3. You may verify this creation with the command: .databases
3. To create a table:
   1. The databases on sqlite can mostly be thought about as tables with a lot of data- its where everything is stored
   2. Enter the command: sqlite3
   3. Enter the command: CREATE TABLE databasename.tablename(
   4. Now we are going to create the columns
   5. Enter the command: columnname datatype PRIMARY KEY,
      1. Primary key will be how you reference the object in the database (aka course id is our primary key for courses)
   6. Enter the command: columnname datatype,
      1. Continue this format until you have all the columns that would describe the object the database is for
   7. Enter the command: );
      1. This ends all sqlite commands
4. To add to a table:
   1. Enter the command: INSERT INTO tablename(column1, column2, column3…)
   2. Enter the command: values (value1, value2, value3,..);
5. Delete entry from Table:
   1. Enter the command: DELETE FROM tablename
   2. Enter the command: WHERE primarykeycolum = primarykeytodelete;
6. Delete a table:
   1. Enter the command: DROP TABLE databasename.tablename;

**This document contains only very basic commands to get you started with sqlite3. More can be found at: https://www.tutorialspoint.com/sqlite/index.htm**