# Part 1: Research

Use your school Google account to log into Codecademy. Find a relevant course to SQL (especially SQLite3) and run through the course. Find video tutorials on SQL and SQLite3. Spend enough time that you are comfortable with the idea of relational databases.

# Part 2: Vocab

Compile a list of vocabulary words related to relational databases, SQL, and SQLite3. In the “/SQL/FirstnameLastname/” directory of this week’s DocPac (create if not exist), create a Microsoft Word document called “vocabulary.docx”. Create a readable document that would help others pass a test on those vocabulary words.

# Part 3: Create Sample Data

In two Microsoft Excel spreadsheets, transcribe the following data:

## Table 1

|  |  |  |
| --- | --- | --- |
| 0 | Bob | password123 |
| 1 | Frank | qwerty |
| 2 | Susy | asdfjkl69420 |

## Table 2

|  |  |  |
| --- | --- | --- |
| 0 | 2 | “That’s mad sus, bruh” |
| 1 | 0 | “Sus? Your name is literally ‘Sussy’.” |
| 2 | 2 | “Susy has left the server…” |

Export each spreadsheet as a “.csv” in the “/SQL/FirstnameLastname/” directory of this week’s DocPac (create if not exist).

# Part 4: Create Database and Tables

Using DB Browser (for SQlite), create a new database file in the “/SQL/FirstnameLastname/” directory of this week’s DocPac (create if not exist). In the database file, create the following two tables:

## users

***uid*** (Primary Key, Not Null, Auto-Increment, Unique), ***user\_name*** (Unique, Not Null), ***password*** (Not Null)

## posts

***uid*** (Primary Key, Not Null, Auto-Increment, Unique), ***user\_uid*** (Unique, Not Null), ***text***

Using DB Browser SQLite3, import Table 1 of Part 3 into the users table, and Table 2 into the posts table.

# Part 5: Interface with Nodejs

1. Start a new NodeJS project in the “/SQL/FirstnameLastname/” directory of this week’s DocPac.
   1. The root of the project should be shared with the database, vocabulary document, and two CSVs.
2. Download/install/import the ‘sqlite3’ module using NPM.
3. When the application runs
   1. Open the database file with sqlite3
   2. Use sqlite3.all() to get an array of all entries in the “posts” table that were posts made by “Susy”, and log this array to the console.
      1. Assume you do not know Susy’s uid. Search by their name.
4. Save the application
5. Delete the node\_modules folder before committing and submitting a new PR into docpacs2223.