Topics – Introduction to SQL

(First Draft 10/2/2021)

1. Introduction
   1. What is a database?
   2. Database vs. RDBMS
   3. Why do we use databases as opposed to flat files?
   4. Getting connected
   5. How to run SQL Commands
   6. Running a script
2. Starting SQL – the foundations
   1. Differing datatypes
   2. Basic table structure
   3. Table create statements
   4. Insert/Update/Delete statements
3. Select statements
   1. Single table statements
   2. Filtering data
   3. Sorting data
   4. Comments
4. Logical Operators
5. Select statements with row level functions
   1. Row level functions
6. Joining tables together
   1. Overview of Primary and Foreign keys
   2. Basic Join concepts
   3. Basic Table joins
   4. 3 and more table joins
7. Column level operators
   1. SUM, MAX, MIN, AVG, COUNT
   2. GROUP BY, HAVING
8. Combining the above (yes, I know I need to name this something else) 😊
   1. Using logical operators with joined tables
   2. Using where and order by clauses with joined tables
   3. Using column level operators with joined tables