## How to break down a SQL Problem

- 1. Look at the question and identify all the tables that are involved in the question.
  - a. Jot these down in your notes first
  - b. Prep the FROM/JOIN clauses after
- 2. Identify the columns (fields) that you need to either a) display or b) use to create a display
  - a. Start building the SELECT clause
  - b. Start building a subquery FROM/SELECT clauses
- 3. Identify what will be coalesced with the GROUP BY clause
  - a. Remember the AS for the proper naming conventions
- 4. Identify the paths used to connect the tables
  - a. Primary to Foreign key
  - b. Multiple PK means compound ON clause (AND each paths)
  - c. These go to the ON clause(s)
- 5. Build the first draft of the query
  - a. SAVE!
- 6. Check the results
  - a. Does it match the expected results?
  - b. What is different?
  - c. Ask questions to yourself
- 7. Add details and update query
  - a. Do you need an ORDER BY clause?
  - b. Adjust column order
- 8. Repeat as needed!