**Structuring Multiple Queries in SQL**

**Preparation**

* What tables do I need
* What do I want the result to look like
* How should I visualize joining them

--**Step 1:** Tell the db what **columns** you are looking for

Select

* For all columns use \*
* The Select clause will be what is output.
* The order of columns you will be the order they are presented in the output
* A table is also called an ‘entity’

--**Step 2:** **Aggregate** where needed

SUM, AVG, COUNT, IF/ELSE

--**Step 3:** Tell the db **which database** and **tables** to get the columns from

From

--**Step 4: JOIN** any tables

OUTER Join

INNER Join

JOIN

* Primary Keys are those with a gold key in the ERR. Use primary keys for identifying a unique record/row.
* Foreign keys are those that are from another table but can be used to join tables. Imported into a table in order to link to another table.

--**Step 5:** Add any **conditions/filters**

Where clause

--**Step 6:** **Group** information **within** acolumn information.

Group by

Only if you are aggregating something. So back to the first select line – if there is an aggregation added to that then you must have a group by clause. However, you only put the non-aggregated columns int eh group by clause. See example below:

SELECT customerID, customerName, SUM(orderQuantity)

FROM table

GROUP BY customerID, customerName

--**Step 7:** Do you need to present the data within a column in a certain **order**?

Order by ASC DESC