**SQL Summary Notes**

Basic SQL commands (Read only) for Product Managers:

1. **Basic Syntax:**

Select columns

From table

Where conditions

Group by columns

Having aggregate\_condition

Order by columns

Limit n

1. **Filtering:**
   1. Where vs Having:

Where: Filters rows before aggregation

Having: Filters after group by

* 1. Comparison Operators: >, <, >=, <=, ==, <> (not equal to)

Null Handling: is null, is not null

Boolean Logic: AND, OR

In/ not in, between, like (with %)

1. **Joins:** Helps join 2-3 tables using primary key
   1. Cross join: Cartesian product
   2. Inner join: Intersection
   3. Left/ Right join: keeps all from left/right, nulls when no match
   4. Full outer join: union with nulls
   5. Self join: joining a table to itself

Eg. Select a.id, b.value from table\_as as a left join table\_b as b on a.key= b.key

1. **Aggregations:**
   1. COUNT(), SUM(), AVG(), MIN(), MAX()
   2. Group by: Select \* from <table> group by <column> having <condition>
   3. Distinct: for unique data fetch

Eg. Select sum(column), count(distinct(column)) from table where sum>5