

# SQL Commands

1) Select → Retrieve data

Select col1, col2 from table;

2) Where → filter rows before grouping

3) Group By → Apply Aggregates

Select sum(revenue) from sales group by region;

Count(\*), Sum(col), Avg(col), Min(col), Max(col)

Group By → rows after where

4) Having → filter after aggregation  
↳ i.e. after Group By

5) Order By → DESC, ASC

Order by total DESC;

6) Limit / offset

LIMIT 10 OFFSET 20;

7) DISTINCT

Select distinct region from Sales

Join → combines rows from 2/more tables

Inner Join → Matching Rows only

Left Join → All Left + Matching Right

Right Join → All Right + Matching Left

Full Outer Join → All rows from Both

Eg: Select o.id, c.name from order o  
Inner Join customer c on o.customer-id  
= (c.id)

Self Join -> same 2 tables

Many to Many JOIN

Select s.name, c.name from students s  
Join enrollments e on s.id = e.student-id  
Join courses c on e.course-id = c.id;