SQL Cheat Sheet

Databases & DBMS

- Data → stored in a database
- Databases → managed by database management systems (DBMS)
- Specific type of DBMS is relational
- SQL queries are used to access data from relational databases

Query Syntax & Strategy

- Capitalize all SQL commands
- End all SQL queries with a semi-colon
- Start each new SQL command on a new line if possible
- Use Cognitir's *Trifecta SQL Query-Building Method ™* to help you build queries.

Common SQL Commands

OPERATORS:

=	Equal
>	Greater than
<	Less than
>=	Greater than or equal
<=	Less than or equal
<> or !=	Not equal
AND / OR	Standard and/or operators

SELECT:

SELECT column_name(s)
FROM table_name;

SELECT WITH AS:

SELECT column_name(s) AS column_alias
FROM table_name;

LIMIT:

SELECT column_name(s)
FROM table_name
LIMIT x;

COUNT:

SELECT COUNT(column_name(s))
FROM table_name;

DISTINCT:

SELECT DISINCT(column_name(s))
FROM table_name;

ORDER BY:

SELECT column_name(s)
FROM table_name
ORDER BY column_name ASC/DESC;

WHERE:

SELECT column_name(s)
FROM table_name
WHERE column_name conditions;

BETWEEN:

SELECT column_name(s)
FROM table_name
WHERE column_name
BETWEEN x and y;

IN:

SELECT column_name(s)
FROM table_name
WHERE column_name
IN (x, y, z, …);

LIKE / ILIKE:

SELECT column_name(s)
FROM table_name
WHERE column_name ILIKE/LIKE single_pattern

AGGREGATE FUNCTIONS:

ROUND (x, y), AVG (column_name), MIN/MAX (column_name), SUM (column_name)

GROUP BY / HAVING:

SELECT column_name, aggregate_function(column_name)
FROM table_name
WHERE column_name conditions
GROUP BY column_name
HAVING aggregate_function conditions;

UNION:

SELECT column_name(s)
FROM table_name_1
UNION
SELECT column_name(s)
FROM table_name_2

INNER JOIN:

SELECT column_name(s)
FROM table_name_1
INNER JOIN table_name_2
ON table_name_1.column_name = table_name_2.column_name

LEFT JOIN:

SELECT column_name(s)
FROM table_name_1
LEFT JOIN table_name_2
ON table_name_1.column_name = table_name_2.column_name

RIGHT JOIN:

SELECT column_name(s)
FROM table_name_1
RIGHT JOIN table_name_2
ON table_name_1.column_name = table_name_2.column_name

SUBQUERY with singular value:

SELECT column_name(s)
FROM table_name_1
WHERE column_name >
(SELECT single_value
FROM table_name_1
WHERE column_name conditions);

SUBQUERY with multiple values:

SELECT column_name(s)
FROM table_name_1
WHERE column_name IN
(SELECT column_name
FROM table_name_1
WHERE column_name conditions);