

SQL Cheat Sheet

Select Columns



SELECT ticker, revenue **FROM** company_info
columns (use * to select all) table

Select all rows from the given columns and table.

Append additional commands to the end.

SELECT DISTINCT ticker, revenue **FROM** companies

Only select distinct rows from the given columns and table.

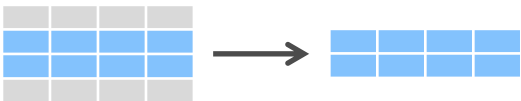
Sort Rows

ORDER BY net_income **DESC**

Sort rows in descending order.

Omit **DESC** for ascending order.

Filter Rows



LIMIT 5

Limit the number of rows selected.

WHERE revenue > 100

Only select rows that satisfy a condition.

NOT, AND, OR

Negate or combine conditions.

Conditions

sic_code **BETWEEN** 1000 **AND** 1499

Rows where value is in an inclusive range.

ticker **IN** ('K0', 'PEP')

Rows where value is in a list.

revenue **IS NOT NULL**

Rows where value is not missing.

ticker **LIKE** 'A%'

Rows where value matches a pattern.

Wildcard patterns:

_ Any 1 character

% Any 0 or more characters

Transform Columns

Column operators:

+ Addition

- Subtraction

***** Multiplication

/ Division

% Modulo

|| Concatenation

ABS(revenue)

Compute absolute values.

ROUND(revenue / asset, 3)

Round to given number of decimal places.

LENGTH(ticker)

Compute total number of characters.

LOWER(company_name)

Convert all characters to lowercase.

UPPER(sector)

Convert all characters to uppercase.

TRIM(company_name, ' ')

Remove given character(s) at both ends.

REPLACE(industry, '&', 'and')

Replace all cases of second string with third.

SUBSTR(company_name, 1, 3)

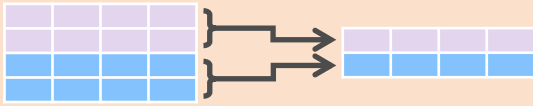
Get substring at position with given length.

Rename Columns or Tables

revenue **AS** rev

Create an alias for a column or table.

Summarize Columns



AVG(revenue)

Compute mean of values in a column.

COUNT(asset)

Compute number of values in a column.

MAX(revenue)

Compute maximum of values in a column.

MIN(asset)

Compute minimum of values in a column.

SUM(revenue)

Compute sum of values in a column.

GROUP BY sector

Group rows before computing summaries.

HAVING COUNT(sector) > 3

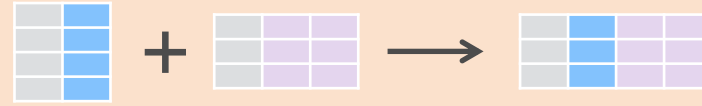
Only select groups that satisfy a condition.

Dates

DATE(date)

Convert a text column to a date.

Combine Tables



dot notation for specific table and column

```
SELECT r.ticker, r.revenue, l.zip FROM
      company_info AS l
INNER JOIN
      company_locations AS r
ON l.ticker = r.ticker
```

left table
type of join
right table

condition to match rows

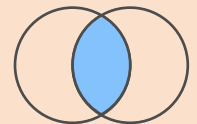
Combine two tables using given condition to match rows.

Types of joins:

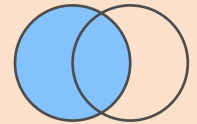
INNER Matching rows only.

LEFT All rows from left table,
matching rows from right table.

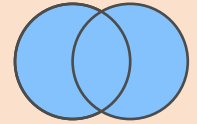
FULL All rows from both tables.



INNER



LEFT



FULL

Temporary Tables and Views

CREATE TEMPORARY TABLE state_revenue **AS SELECT** ...

Create a new table from a query. The table will be deleted when the database is closed.

CREATE TEMPORARY VIEW state_revenue **AS SELECT** ...

Save (but do not run) a query. The query will be deleted when the database is closed.

Omit **TEMPORARY** to make the new table/view permanent.