SQL Commands

Tutorial: <https://www.w3schools.com/sql/>

Selecting

* SELECT \* FROM Database;
  + Get whole table
* SELECT \* FROM Database as NewDatabaseName;
  + Refer to the table as NewDatabaseName
* SELECT column\_title FROM Database;
  + Get only *column\_title* column
* SELECT DISTINCT column\_title FROM Database;
  + Get unique *column\_title*’s from database
* SELECT \* FROM Database WHERE column\_title = “string”;
  + Get entries with *column\_title* having value “string”
* SELECT \* FROM Database WHERE NOT column\_title = “string”;
  + Get entries with *column\_title* not having value “string”
* SELECT \* FROM Database WHERE NOT column\_title = 5 AND column\_title2 = 35;
  + Get entries with 2 given criteria (useable with OR as well)
* SELECT \* FROM Database ORDER BY column\_title (DESC);
  + Get whole table, sorted by *column\_title*, DESC being descending order
* SELECT \* FROM Database WHERE column\_title IS (NOT) NULL;
  + Get entries where *column\_title* is blank, not is opposite
* SELECT MIN(column\_title) FROM Database;
  + Get the entry with the smallest column\_title value
* SELECT MAX(column\_title) FROM Database;
  + Get the entry with the greatest column\_title value
* SELECT COUNT(\*) FROM Database WHERE column\_title = ‘string’;
  + Return count of entries with given conditions
* SELECT AVG(column\_title) FROM Database;
  + Return average value of column\_title
* SELECT SUM(column\_title) FROM Database;
  + Return sum of column\_title values
* SELECT \* FROM Database WHERE column\_title LIKE ‘a%’;
  + Get entries with column title starting with character a
  + % character means 0 or more of any character
  + \_ represents 1 of any character
  + [abcd] and [a-d] represents ‘a’ or ‘b’ or ‘c’ or ‘d’
  + [!abc] represents not an ‘a’ or ‘b’ or ‘c’
* SELECT \* FROM Database WHERE column\_title NOT LIKE ‘a%’;
  + Get entries that do not start with the letter ‘a’
* SELECT \* FROM Database WHERE column\_title IN (‘string1’, ‘string2’);
  + Get entries where column\_title is value string1 or string2
* SELECT \* FROM Database WHERE column\_title BETWEEN 10 AND 20;
  + Get entries with column\_title values being between 10 and 20

Insert

* INSERT INTO Database (column\_title1, column\_title2) VALUES (5, 10);
  + Add entry with values 5 and 10 into respective columns

Update

* UPDATE Database SET column\_title = ‘string’;
  + Set all entry’s *column\_titles* to ‘string’
* UPDATE Database SET column\_title = ‘string’ WHERE column\_title2 = ‘string2’;
  + Set all entry’s *column\_titles* to ‘string’ if other column is ‘string2’

Delete

* DELETE FROM Database;
  + Delete all entries
* DELETE FROM Database WHERE column\_title = ‘string’;
  + Remove all entries with column title being ‘string’

Join

* SELECT \* FROM Database LEFT JOIN Database2 AS Database.column\_title = Database2.column\_title2;
  + LEFT JOIN - Returns all entries from Database and matching from Database2
  + INNER JOIN – Returns all matching entries
  + RIGHT JOIN – Return Database matching, and all entries from Database2