

# SQL 101

## Basic Syntax

### SQL Statements

Most of the actions you need to perform on a database are done with SQL statements.

### Common / Important Queries

- **SELECT** - extracts data from a database
- **UPDATE** - updates data in a database
- **DELETE** - deletes data from a database
- **INSERT INTO** - inserts new data into a database
- **CREATE DATABASE** - creates a new database
- **ALTER DATABASE** - modifies a database
- **CREATE TABLE** - creates a new table
- **ALTER TABLE** - modifies a table
- **DROP TABLE** - deletes a table
- **CREATE INDEX** - creates an index (search key)
- **DROP INDEX** - deletes an index

### Create Database

Syntax:

```
CREATE DATABASE database_name
```

CREATE DATABASE creates a database with the given name. To use this statement, you need the CREATE privilege for the database.

## Create Table

### Syntax:

```
CREATE TABLE table_name
```

Use the CREATE TABLE statement to create a table with the given name. You must have the CREATE privilege for the table or on the database to create a table.

## Select

### Syntax:

```
SELECT * FROM table_name
```

SELECT is used to retrieve rows selected from one or more table. The \* operator means “all” this means it will grab all your data from the selected database.

## Update

### Syntax:

```
UPDATE table_name SET name = 'Jason Candle' WHERE id = 1;
```

used when you want to add (or insert) new data to a column.

## Delete

### Syntax:

```
DELETE FROM mytable WHERE id = 1;
```

used when you want to remove (or delete) existing data.

## Insert

### Syntax:

```
INSERT INTO (column1, column2, column3) VALUES (value1, value2, value3)
```

INSERT inserts new rows into an existing table.

For more syntax and details please visit this link:

<https://mariadb.com/kb/en/mariadb/basic-sql-statements/>