

Datstores implement the CRUD operations:

- C: **create** – put data into the datastore
- R: **read** – get data from the datastore
- U: **update** – change the data in the datastore
- D: **delete** – remove data from the datastore

RDBMS – relational database management system

SQLite v3 - <https://sqlite.org/index.html> – single-user RDBMS

SQL: aka “sequel” - Structured Query Language – specify **WHAT** you want to happen, and the RDBMS works out the details.

Example technologies: Oracle – MySQL – MariaDB

DDL: Data Definition Language – describes the **structure** of your data – what type of data, how many columns, how many entities.

Example commands (see the transcript for examples) include:

```
create database
grant
show databases
show tables
create table
describe
drop table
```

DML: Data Manipulation Language – work with you data – these are the CRUD operations.

- `select` – CRUD's read – filtering with "where" - sorting with "order by", either DESC or ASC (default).
- `insert` – CRUD's create.
- `update` – the same as CRUD's update operation.
- `delete` – the same as CRUD's delete operation.

BUT: BE CAREFUL – `select` FIRST, then `delete` or `update` (based on requirements).