

DATA AND VALUES

DATA TYPES	
TEXT: Characters surrounded by quotes	"String1"
INTEGER: Whole number, positive or negative	10 0
REAL: Floating point (decimal) number	-20.50 5.32434
BOOLEAN: True or False values	TRUE FALSE
DATETIME: A string representing a date	"2021-01-02"
NULL: Value missing/not entered	NULL

SQL FILE

CREATING & RUNNING SQL FILES	
Create database (on the command line)	<code>sqlite3 databasename.db</code>
Read sql file and run commands within	<code>.read file.sql</code>
Get a list of all the tables within the database	<code>.tables</code>
Get information on a specific table	<code>PRAGMA table_info(TableName)</code>
COMMENTS	
Block comment (multi-line)	<code>/* Commented Out */</code>
Single-line comment	<code>--Commented Out</code>

CREATE TABLE

Create table syntax Include optional constraints:	<pre>CREATE TABLE [IF NOT EXISTS] TableName (Column1 DataType [UNIQUE] [NULL NOT NULL], Column2 DataType, [...] [CONSTRAINT constraint_type]);</pre>
Include optional constraints:	<pre>CREATE TABLE [IF NOT EXISTS] TableName ([...] CONSTRAINT constraint_type);</pre>
Check if table exists before creating	<pre>CREATE TABLE IF NOT EXISTS TableName ([...]);</pre>
Ensure values in column are unique	<pre>CREATE TABLE TableName (Column1 DataType UNIQUE, Column2 DataType, [...]);</pre>
Using CONSTRAINT: Can add multiple columns to list	<pre>CREATE TABLE TableName ([...] CONSTRAINT UK_ColName UNIQUE(ColName, [ColName2]));</pre>
Create primary key from Column1	<pre>CREATE TABLE [IF NOT EXISTS] TableName (Column1 DataType PRIMARY KEY);</pre>
Using CONSTRAINT: Can add multiple columns to a primary key	<pre>CREATE TABLE [IF NOT EXISTS] TableName (ColumnName1 DataType, [...] CONSTRAINT PK_Col1_Col2 PRIMARY KEY (Col1, Col2));</pre>
Create an auto-increment integer primary key	<pre>CREATE TABLE [IF NOT EXISTS] TableName (ColumnName1 INT PRIMARY KEY AUTOINCREMENT);</pre>
Example: Create new table Orders with 3 columns: Id, Name, Total	<pre>CREATE TABLE Order(OrderId INT PRIMARY KEY AUTOINCREMENT, Name VARCHAR(255), Total REAL);</pre>

ALTERING & DELETING A TABLE

Add column	<code>ALTER TABLE TableName ADD COLUMN ColumnName DataType [NOT NULL];</code>
Create new column & ensure values added are not null	<code>ALTER TABLE TableName ADD COLUMN ColumnName DataType NOT NULL;</code>
Set default value for rows in new column	<code>ALTER TABLE TableName ADD COLUMN ColumnName NOT NULL DEFAULT DefaultValue;</code>
Drop column	<code>ALTER TABLE TableName DROP COLUMN ColumnName</code>
Rename column	<code>ALTER TABLE TableName RENAME COLUMN OldName TO NewName</code>
Rename table	<code>ALTER TABLE TableName RENAME TO NewTableName</code>
Truncate table	<code>TRUNCATE TABLE TableName;</code>
Delete a table	<code>DROP TABLE TableName;</code>