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CIS 150

**1.SQLite data types:**

**Null:**

A null is something that is nothing. A null is not data but merely a lack of data. Null is generally used in SQLite to represent data that is unknown/missing/incomplete.

**Integer:**

An integer is put into place to hold a value.

**Float:**

A “float” number is similar to an integer but the difference being that a float is a floating-point number with a decimal.

**Text:**

A text is a string of characters.

**Blob:**

A blob is a string of binary bytes that holds a large amount of data in a single blob.

**2.Dot Commands:**

There are many different dot-commands that can be used with SQLite, I have tested them all. Screenshots are included in the same folder that this text file was found in.

**3.Three-valued Logic:**

Normally we like to think of things as being true or false. Three-valued logic refers to the fact that there exists a third “unknown” that occurs in SQLite. Earlier I mentioned “nulls” and these play a big factor in three-valued logic. Three-value logic takes the normal boolean true and false of programming and adds an unknown null to the mix. The reason that this is needed is because nulls don’t mesh well with other values. “NULLs don’t interact well with other values. If a NULL represents an unknown that might be any possible value, how can we know if the expression NULL > 3 is true or false? (Kreibich, 31).

**4.SQLite operators:**

**||** Used to Concatenate text values. (Kreibich,347)

**\*** Multiplies two numbers together

**/** Divides two numbers

**%** Used to show the remainder of two numbers

**+** Adds two numbers together

**-** Subtracts two numbers

**<< >>** Shifts binary bits

**&** This is used for bitwise operations for AND and OR. These are for binary use only.

**< <= => >** For greater than, greater than or equal to, less than, and less than and equal to these are all used much like in math and other programing.

**==** Double equal signs are used to mean equal.

**!= <>** Not equal

**AND OR** For logical applications AND and OR are both used.

**Sources:**

* <https://www.amazon.com/gp/product/B008IGK5QM/ref=dbs_a_def_rwt_hsch_vapi_tkin_p1_i0>
* <https://modern-sql.com/concept/three-valued-logic>
* <https://www.w3resource.com/sqlite/sqlite-data-types.php>